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New York City Transportation Administration

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Urban Mass Transportation Administration
Washington, DC

Jun 76

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Manhattan Garment Center Urban Goods Movement Study

APPENDIX VOLUME I

NEW YORK CITY
TRANSPORTATION
ADMINISTRATION

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16. Abstract

The Manhattan Garment Center Urban Goods Movement (UGM) Study represents the first major effort to investigate the goods movement problems existing in a major, highly urbanized environment. This apparel industry is located in a light manufacturing area situated in the heart of Manhattan. It is the largest manufacturing industry in the City as well as in New York State. The project is a comprehensive study of UGM and is organized to meet several objectives: 1) to be accessible and responsive to the community; 2) to develop design, evaluate, and implement short-term, low capital improvements for the UGM system; and 3) to identify long-term solutions to goods movement difficulties.

This Appendix Volume I provides a detailed description of the activities and analyses concucted during Phase I of the Manhattan Garment Center Urban Goods Movement Study. Volume I provides an overview of the Garment Center including goods movement and the apparel industry; basic traits and industry trends of the apparel industry; outward movement of contractors; future trends; and an appendix discussing the Standard Industrial Classification System. The report also discusses the apparel industry questionnaire including method of data collection; summary of observations; general characteristics; location of contractor's facilities; characteristics of freight; and exhibits charting the apparel industry questionnaires. The third part of this volume discusses land use and economic data, including building analysis; zoning; assessed value; employment; rents and vacancy rates; and sample block segments.

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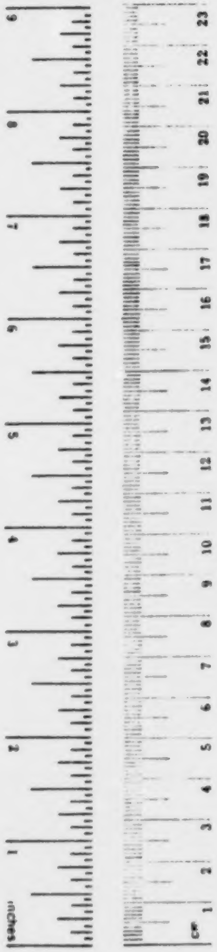
METRIC CONVERSION FACTORS

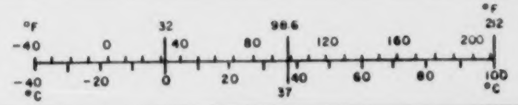
Approximate Conversions to Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
in	inches	*2.5	centimeters	cm
ft	feet	30	centimeters	cm
yd	yards	0.9	meters	m
mi	miles	1.6	kilometers	km
		AREA		
in^2	square inches	6.5	square centimeters	cm^2
ft^2	square feet	0.09	square meters	m^2
yd^2	square yards	0.8	square meters	m^2
mi^2	square miles	2.6	square kilometers	km^2
	acres	0.4	hectares	ha
		MASS (weight)		
oz	ounces	28	grams	g
lb	pounds	0.45	kilograms	kg
	short tons (2000 lb)	0.9	tonnes	t
		VOLUME		
tsp	teaspoons	5	milliliters	ml
Tbsp	tablespoons	15	milliliters	ml
fl oz	fluid ounces	30	milliliters	ml
c	cups	0.24	liters	l
pt	pints	0.47	liters	l
qt	quarts	0.95	liters	l
gal	gallons	3.8	liters	l
ft^3	cubic feet	0.03	cubic meters	m^3
yd^3	cubic yards	0.76	cubic meters	m^3
		TEMPERATURE (exact)		
°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C



Approximate Conversions from Metric Measures

Symbol	When You Know	Multiply by	To Find	Symbol
		LENGTH		
mm	millimeters	0.04	inches	in
cm	centimeters	0.4	inches	in
m	meters	3.3	feet	ft
m	meters	1.1	yards	yd
km	kilometers	0.6	miles	mi
		AREA		
cm^2	square centimeters	0.16	square inches	in^2
m^2	square meters	1.2	square yards	yd^2
km^2	square kilometers	0.4	square miles	mi^2
ha	hectares (10,000 m^2)	2.5	acres	
		MASS (weight)		
g	grams	0.035	ounces	oz
kg	kilograms	2.2	pounds	lb
t	tonnes (1000 kg)	1.1	short tons	
		VOLUME		
ml	milliliters	0.03	fluid ounces	fl oz
l	liters	2.1	pints	pt
l	liters	1.06	quarts	qt
l	liters	0.26	gallons	gal
m^3	cubic meters	35	cubic feet	ft^3
m^3	cubic meters	1.3	cubic yards	yd^3
		TEMPERATURE (exact)		
°C	Celsius temperature	9/5 (then add 32)	Fahrenheit temperature	°F



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*1 in = 2.54 (exactly). For other exact conversions and more detailed tables, see NBS Misc. Publ. 286, Units of Weights and Measures, Price $2.25, SD Catalog No. C13.10:286.

MANHATTAN GARMENT CENTER
URBAN GOODS MOVEMENT STUDY - PHASE I
APPENDIX - VOLUME I

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JUNE, 1976
DOT-TRI-STATE CONTRACT
(DOT-OS-30053)

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FOREWARD

The following is Appendix - Volume I to the Phase I Final Report of the Manhattan Garment Center Urban Goods Movement Study. Phase I consists of the development of a data base, analysis of the goods movement problem, and implementation of short-range proposals to improve the movement of goods and people. This study was funded by the City of New York, the United States Department of Transportation, the Office of the Assistant Secretary for Policy, Plans and International Affairs, and the Office of the Assistant Secretary for Systems Development and Technology, and the United States Environmental Protection Agency. The DOT-Tri-State contract (DOT-OS-30053) was signed in October of 1972 and announced by Secretary Volpe during a visit to the Garment Center. The agreement between TAD-Tri-State was signed in May of 1973. The project wishes to acknowledge the continuing support and the assistance provided by the numerous agencies and individuals involved. In particular the help of Dr. Charles Hedges of the United States Department of Transportation and Robert T. Wood of the Tri-State Regional Planning Commission has been invaluable.

The role of urban goods movement in the transportation planning process has not yet been clearly established. There are two divergent schools of thought on this issue. The first would attempt to reduce the economic, environmental, and social costs of the present urban goods movement system. The second school recognizes the costs but states they are the responsibility of private enterprise and beyond the realm of influence of government. One objective of this Study has been to show that it is feasible to improve the goods transportation system by the use of existing tools available to government agencies in a cooperative effort with private enterprise.

Work on Phase II of the Manhattan Garment Center Urban Goods Movement Study began in September 1975. Phase II will consist of a continuation of certain elements of the Phase I program and will initiate several additional areas of investigation, such as consolidation and parking reservation systems.

This Appendix - Volume I provides a detailed description of the activities and analyses conducted during the Manhattan Garment Center Urban Goods Movement Study - Phase I. Additional detailed information is provided in Appendix - Volume II and Appendix - Volume III. A summary of the Phase I effort appears in a report titled, Manhattan Garment Center Urban Goods Movement Study - Phase I.

I OVERVIEW OF THE GARMENT CENTER

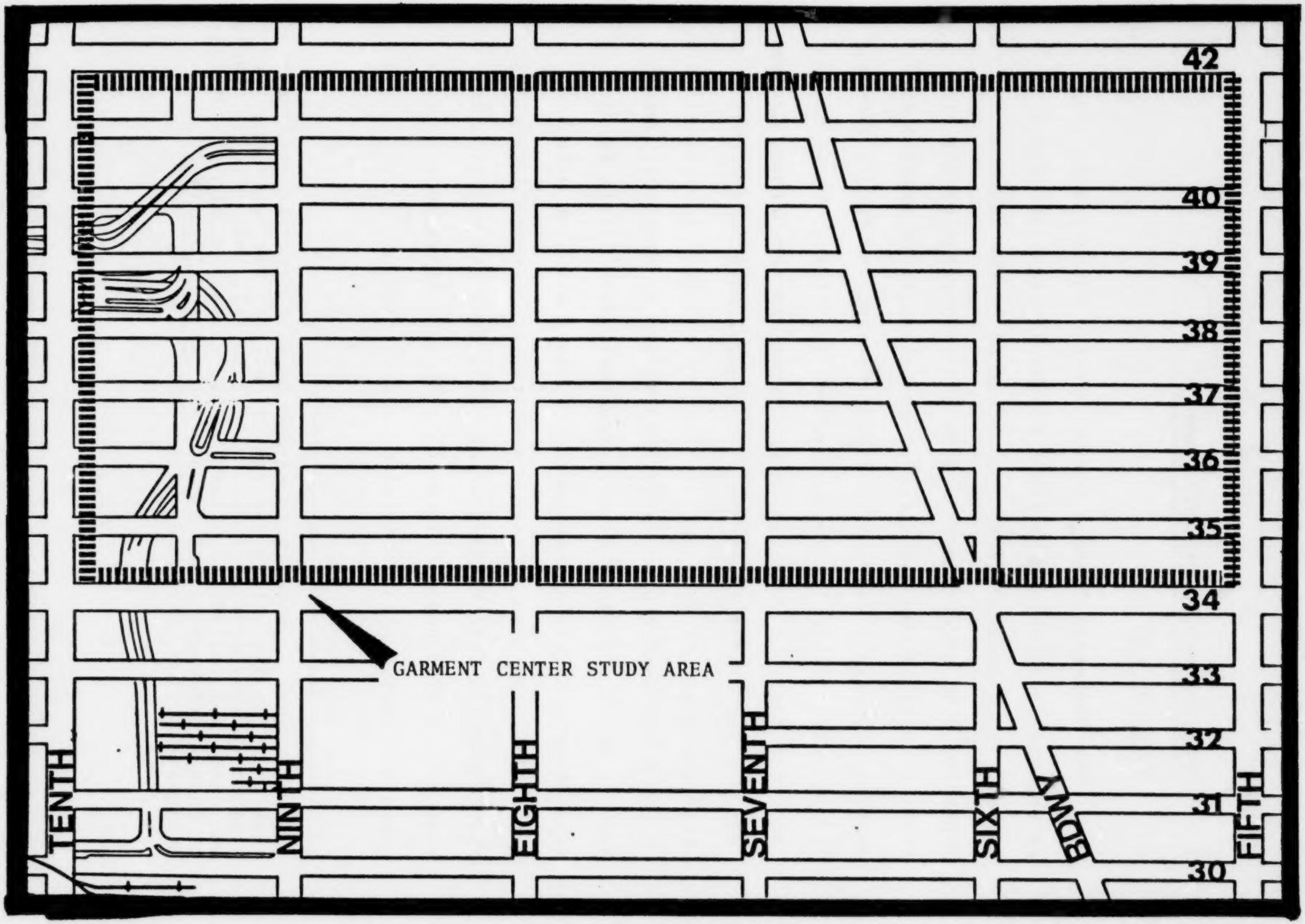
I.1 INTRODUCTION

The Manhattan Garment Center Urban Goods Movement Study is engaged in studying the goods movement system serving a compact light manufacturing area situated in the heart of Manhattan. To understand the role and importance of the District's goods movement system, it is necessary to examine the apparel industry's characteristics, its past and future trends, and its relation to the goods movement structure. Three major factors affect the goods movement process in the Garment Center. They are the area's location, its physical make-up and the characteristics of the apparel industry and its concentration.

The Garment Center is defined as the 40 blocks situated between Fifth and Tenth Avenues from West 34th Street to West 42nd Street, as shown in Figure I-1. This area, an urbanized commercial area, has a heavy concentration of women's outerwear and children's wear manufacturing. The products principally made in the area consist of women's dresses of various prices, coats and suits, children's wear, and sportswear.(1)

---

(1) Sportswear is a catchall phrase used to describe outerwear that does not fit within the traditional definition of outerwear. Clothes in this category tend to be informal, versatile in usage, and come in a variety of price lines. For an amusing discussion of what sportswear is and is not, see The New York Times, Business Section, March 24, 1974


42
40
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37
36
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34
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32
31
30
TENTH
NINTH
EIGHTH
SEVENTH
SIXTH
BDWY
FIFTH
GARMENT CENTER STUDY AREA

Figure I-1 GARMENT CENTER STUDY AREA

The concentration of apparel firms has attracted to the District establishments that service the apparel industry. Thus, numerous suppliers of textiles, zippers, buttons, paper goods, and transportation services are concentrated here as are apparel firms. In addition, the convergence of a large number of people within a small area has led to the growth of fast food, commercial and retail establishments.

I.2 GOODS MOVEMENT AND THE APPAREL INDUSTRY

I.2.1 Congestion

The Garment Center is unique in that is one of the most congested areas in the world. Thirty percent of the 220 acres in the District are streets. The remaining land is occupied by 704 buildings with 43.7 million square feet of space. Almost 8,000 firms with approximately 116,000 employees are located within the study area. Major transportation nodes, the Port Authority of New York and New Jersey Bus Terminal, the Pennsylvania Railroad Station, and the Grand Central Railroad Station are located on the periphery of the District. Along the southern and eastern rims of the Garment Center, there is a high concentration of major retail establishments, such as Macy's and Lord and Taylor's. Thus, in addition to those working in the area, thousands more traverse the District on their way to work and for shopping.

The intense land-use activity leads to high vehicular volumes. Trucks and vans service the needs of the firms located within the area. Taxis and autmobiles bring passengers to the area and to the surrounding land-uses. In addition, people use the District as a conduit between New Jersey and Long Island. On a typical day 185,000 vehicles enter the area.

The high volume of vehicles, firms, and individuals and their concentration within a small area result in congestion. One of the manifestations of congestion is the greater amount of time required to perform basic transport activities. Travel within the District is slow. A vehicle travelling the length of the District's east-west streets spends, on the average, 18.4 minutes traversing the .9 miles from Fifth Avenue to Tenth Avenues i.e., it is travelling at the rate of 4.9 miles per hour.(1) Pick-ups and deliveries take a long time. A typical trucker, who delivers and pick-ups from his vehicle, will require almost half an hour(2) to complete one round trip from his vehicle to the establishment being serviced. The components of his trip will consist of the following:

TIME COMPONENT	DURATION MINUTES	PERCENT
Obtain Load	6.9	25.6
Administrative	2.1	7.8
Travel	6.7	24.9
Elevator Queue	3.5	13.0
Elevator Travel	2.9	10.8
Waiting to be Received	1.2	4.5
Unloading	3.6	13.4
TOTAL TIME	26.9	100.0

---

(1) Duration of almost 30 minutes (3.0 mph) were not uncommon.
(2) It takes 1.6 pushboys 26.9 minutes to deliver 1.5 pushcarts from a truck to an apparel firm and to return. About 48.7 percent of trip time is spent on the streets.

The largest component of a trip is loading time; it is basically a manual[1] activity performed by the truckman and his helper. Because of the intense competition for curbside parking space, a truck will park, on the average, 552 feet from his destination. The antiquated elevator system and the resultant queues of pushcarts attempting pick-ups and deliveries add an additional 6.4 minutes to the delivery process. Congestion and delays are the standard fare of the area.

I.2.2 Apparel Firm Segmentation

The high level of activity and congestion in the area is due partly to the multiplicity of material handling required in the garment assembly process. Apparel firms have tended to specialize in just one aspect of the garment production process. Three distinct types of firms involved in the manufacturing of outerwear are:

1. A manufacturer is one who has an inside shop. That is, besides buying the cloth and selling the final product, he runs his own production plant in which his workers cut and sew the material into apparel.
2. A jobber is one who buys the raw materials, designs the garments and later sells them, but does not actually manufacture them. The jobber has a showroom and usually a cutting room, but sends the fabric to outside shops to be sewed into apparel.

---

(1) Some trucks have and utilize the power lift gate. Most loading and unloading activity, however, simply uses human power to lift and lower goods from vehicles.

3. A contractor is one who runs the outside shop. He has the establishment where the fabric is sewn into garments and hires the workers, and is, in effect, a labor contractor. He produces to specification. Also he never takes title to the goods and is in no way involved with the marketing of the products. (1)

In addition, there are textile suppliers (wholesalers), shipping goods suppliers, and printers who provide the various services required by the industry. As a result of this division of labor, the apparel production process involves several inflows and outflows from and within the Garment District.

Transportation is the connecting link between the producers, wholesalers, retailers, and customers. Elevators carry goods up and down the Garment Center buildings; hand carts and individuals convey goods between apparel firms, to trucks, and consolidation centers (trucking stores); trucks, the main mode of transportation within urban areas, bring in the raw materials, carry goods in process throughout the East Coast, and distribute the final product all over the United States.

I.2.3 Trucking Firm Segmentation

The specialization of function observed in the apparel industry is paralleled by segmentation in the trucking industry.

---

(1) Made in New York by Max Hall, New York, 1959, p.26

The types of trucking companies to be found in the area include:

1. Over-the-Road Carrier- Trucking companies licensed to carry goods across state lines. All truck companies, operating across state lines, require licensing by the Inter-state Commerce Commission (I.C.C.). Various types of companies exist. Common carriers carry freight for the general public on a for-hire basis. Contract carriers haul freight exclusively for a limited number of shippers by contractual agreement. Private carriers are fleets of vehicles used by a firm to carry its own products. The major activity of these transportation firms is to carry piece goods.

2. Local truckmen-These transportation companies concentrate their activities within the Greater New York Region, also known as the Commercial Zone. No I.C.C. licensing is required. The rates charged are established via negotiations with individual firms. These firms specialize in bringing cut goods to contractors, in bringing hanging goods back to jobbers and manufacturers, and in delivering finished garments to local retail outlets and to apparel consolidation centers. Truckers will usually specialize in providing transportation services for just one stage of the apparel production process. Thus a trucking company will usually just carry cut goods to contractors and hanging goods back into the Garment Center, while another company will only take finished goods to consolidation centers. Besides these contract local carriers, there are trucking firms that carry all types of goods throughout the city in addition to their garment activities.

3. Frieght Forwarders- These trucking firms pick-up various small shipments, consolidate them into car and truck loads and ship them to their destinations, usually by rail. Freight forwarders are charged car load rates, while their customers are charged less than car load rates which are somewhat higher. The differential in rates represents the profit for these firms.

4. Air Freight Forwarders-These firms are similar to surface freight forwarders, the exception being that their shipments are sent by plane. The importance of rapid service has led to a proliferation of such companies within the Garment Center.

5. Packaged Goods Carriers-Certain companies psecialize in the shipment of packages, principally United Parcel

Service and the United States Postal Service. By placing a restriction on the type of container handled, these companies have been able to apply limited automation techniques to the sorting and to the consolidating of shipments.

I.2.4 Flow of Transportation

Also the fragmentation of the apparel and transport industries leads to multiple handling. Figure I-2 indicates the numerous various stages of the garment assembly process. Textiles, known as piece goods, originating in the South, Northeast and overseas arrive in the Garment Center by truck (Steps 1-4).(1) They are delivered by hand cart to fabric houses and to apparel manufacturers. Highly skilled cutters, using patterns developed by a firm's designers and sample makers, cut the textiles within the Garment Center (Steps 5-8). These cut goods are shipped to contractors, who are usually located in the Garment Center, in the outlying counties of the Greater New York Region and in several Middle Atlantic states. There the cut goods are sewn into garments. Trimming, zippers, buttons, and pleating are added either at the sewing plant or at another contractor's shop (Steps 9-13). The finished garment is then returned to the jobber-manufacturer, who packages and ships the garments to retailers throughout the country directly or via a consolidated distribution center (Steps 14-19).

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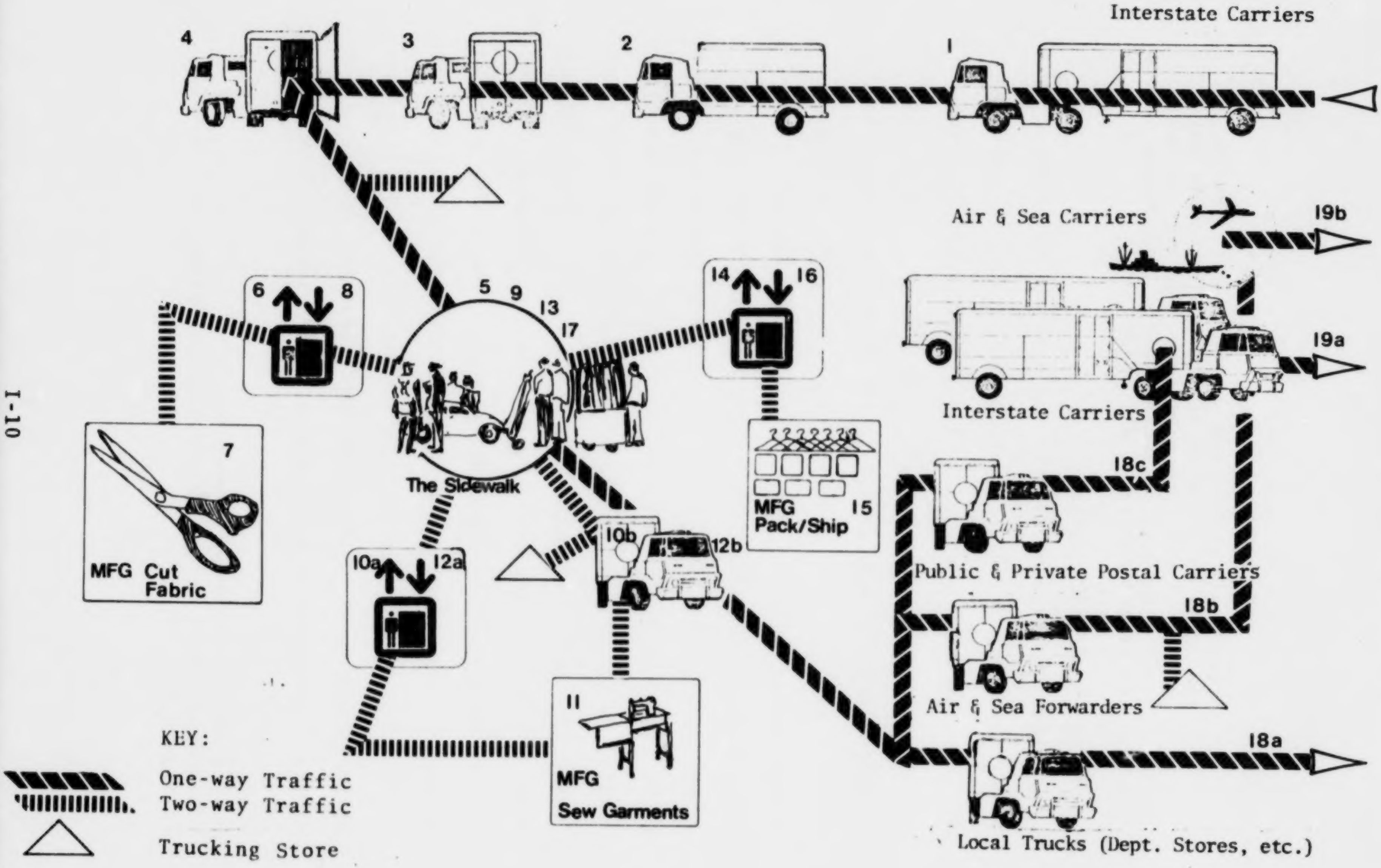
(1) Numbers refer to the transportation operations indicated in Figure I-2.



Interstate Carriers
4
3
2
1
Air & Sea Carriers
19b
19a
Interstate Carriers
6
8
5
9
13
17
14
16
MFG Cut Fabric
7
The Sidewalk
MFG Pack/Ship
15
10a
12a
10b
12b
18c
Public & Private Postal Carriers
18b
Air & Sea Forwarders
11
MFG Sew Garments
18a
Local Trucks (Dept. Stores, etc.)
KEY:
One-way Traffic
Two-way Traffic
Trucking Store

Figure I-2 APPAREL TRANSPORTATION FLOW CHART

Because of the specialization of firms, fragmentation of the apparel producing process necessitates several inflows and outflows of fabric in the garment assembly process. This requires, in almost every case, a truck trip. Because of specialization by truckers, different flows will be handled by different trucking firms. Thus an apparel firm might be visited by up to five different types of carrier every day. A high demand for curb and elevator space is an unavoidable consequence. Since apparel firms are small, truckers will utilize one truck to service several firms so as to attain efficient load sizes. Truck load factors are low and small shipment sizes necessitate frequent handling. Thus, some of the problems experienced in the Garment Center are quite typical of the rest of the country. Although, apparel firms tend to concentrate by type of product produced, trucking companies do not have monopolies on particular products or buildings. Truckers, therefore, can either park their vehicles several times at different locations or park at a central point and walk to the various establishments.

Hence on a typical day, one can observe large, 3-axle trucks, operated by over-the-road carriers bringing in textiles, the raw materials, to the Garment Center, various trucking companies carrying cut goods out of the area and bringing hanging garments into the area, and finished goods being taken on hangers to the truckers' and retailers' consolidation centers. In addition, packaged goods containing finished garments are moved by specialized carriers such as UPS and U.S. Postal Service, and air freight carriers such as Emery. Garment-related truck movement is not the sole truck activity to be observed. Trucks delivering food to the area's restaurants, refuse vehicles, utility vans of the Bell Telephone System and of Consolidated Edison Company, and service vehicles such as air conditioning repair vans can be seen on the streets of the District. A majority of the trucks in the area, however, are directly involved in garment-related activities.

Congestion is a result of the large number of material handling processes, occurring within the confines of a compact urban area. This is due to the fragmentation of the apparel and transportation industries. Because the average apparel and trucking firm is small, sophisticated and expensive goods handling equipment can not be employed. Most procedures must and do employ labor intensive and time intensive techniques.

The problem of congestion is compounded by the Garment Center's buildings, which lack adequate goods movement facilities, such as off-street loading docks. This forces all goods movement activity onto the side-walks and streets of the Center. Thus the sidewalks also become congested with handcarts filled with packages, pushcarts loaded with bundles of cut goods, and piperacks stuffed with hanging garments, all of which intermingled with pedestrians on their way to offices, retail stores, and restaurants.

To understand the congestion problems of the District, we must study the apparel industry, its characteristics, e.g. why the firms are relatively small and concentrated, and its relation and interrelation to the urban goods movement system.

I.3 BASIC TRAITS OF THE APPAREL INDUSTRY

I.3.1 Uniqueness of Styling

I.3.1.1 Small Responsive Firms

The apparel industry firms bear many of the characteristics typical of urban manufacturing. Industries, that function and thrive in urban centers, usually specialize in providing a non-standardized product or service. Quick response to customer requests is one of the competitive edges that firms located within cities have over their large mass production rivals. In addition, urban industries are usually composed of small firms dependent upon the externalities of the city to function.

The apparel industry is populated by numerous small firms. Johnathan Logan, one of the largest apparel firms specializing in women's garment production, had a sales volume of $361.1 million and 12,400 employees in 1973.(1) These figures are pale in comparison to the giants of other American industries. The average apparel firm is even smaller than Johnathan Logan; its annual sales volume is less than $5 million and employs approximately 50 employees.

---

(1) 1973 Financial and Operating Report, American Manufacturer's Association.

The apparel industry is highly concentrated. The New York area accounts for 30 percent of the total 1972 employees. Employment in the top four areas, New York, Los Angeles, Wilkes Barre-Hazelton, and Philadelphia, account for almost 44 percent of the national total.

The characteristics of the women's outerwear industry its high level of concentration and the small size of an average firm-are dictated primarily by the traits of the product produced. The apparel industry is characterized by an emphasis on product differentiation and by the great uncertainty of the performance of any individual firm. The functions of apparel products are essentially two-fold; they provide protection from the elements and can be viewed as an extension of an individual's personality. Since garments are identical in functional use, a firm must emphasize the uniqueness of its product lines in order to generate sales. The garment's ultimate form is what differentiates one establishment's output from the rest of the industry's. The emphasis in the women's outerwear industry revolves around a garment's style, its cut, the type of fabric and design employed, and the various trim used to complete the garment. There are, in principle, two types of apparel; standardized and non-standardized. Standardized apparel, as implied, is unchanging, and can therefore be mass produced. Blue jeans and brassieres are examples. Both items are produced by large companies, using mass production equipment and production cycles as long as six months. Production volumes are very high, but the number of different items is relatively low. Non-standardized items, fashion-oriented apparel, use labor intensive techniques and production cycles as short as two weeks. Many items, each with a relatively low volume, are produced.

I.3.1.2. Firm Flexibility In Response To Seasonality and Uncertainty

The firm's success and its sales volume depend upon the popularity of its style lines; that is, upon the quantity of hot numbers i.e., styles that are in demand, it can generate. To some extent, good styles emanate from the design shops of firms. To a greater extent, the success of a style depends upon the public's tastes and upon the firm's marketing ability, these elements are not easily predictable in an environment where life styles are in flux. An apparel firm must maintain flexibility in its production. With flexibility, a firm can easily and rapidly shift production to styles that are hot.

Firm flexibility is also important because of the seasonal character of the women's outerwear industry, one of the most volatile of American industries. It is more seasonal than the construction industry. Figure I-3 depicts an estimate of the seasonal behavior of the industry in New York City. The data used are monthly observations of employment and hours worked during the 1958-1973 period. The seasonal pattern of work effort is defined as the product of fluctuations in employment and in the average hours of work. Peak activity months are March, 7 percent points above the annual average, and August, 6

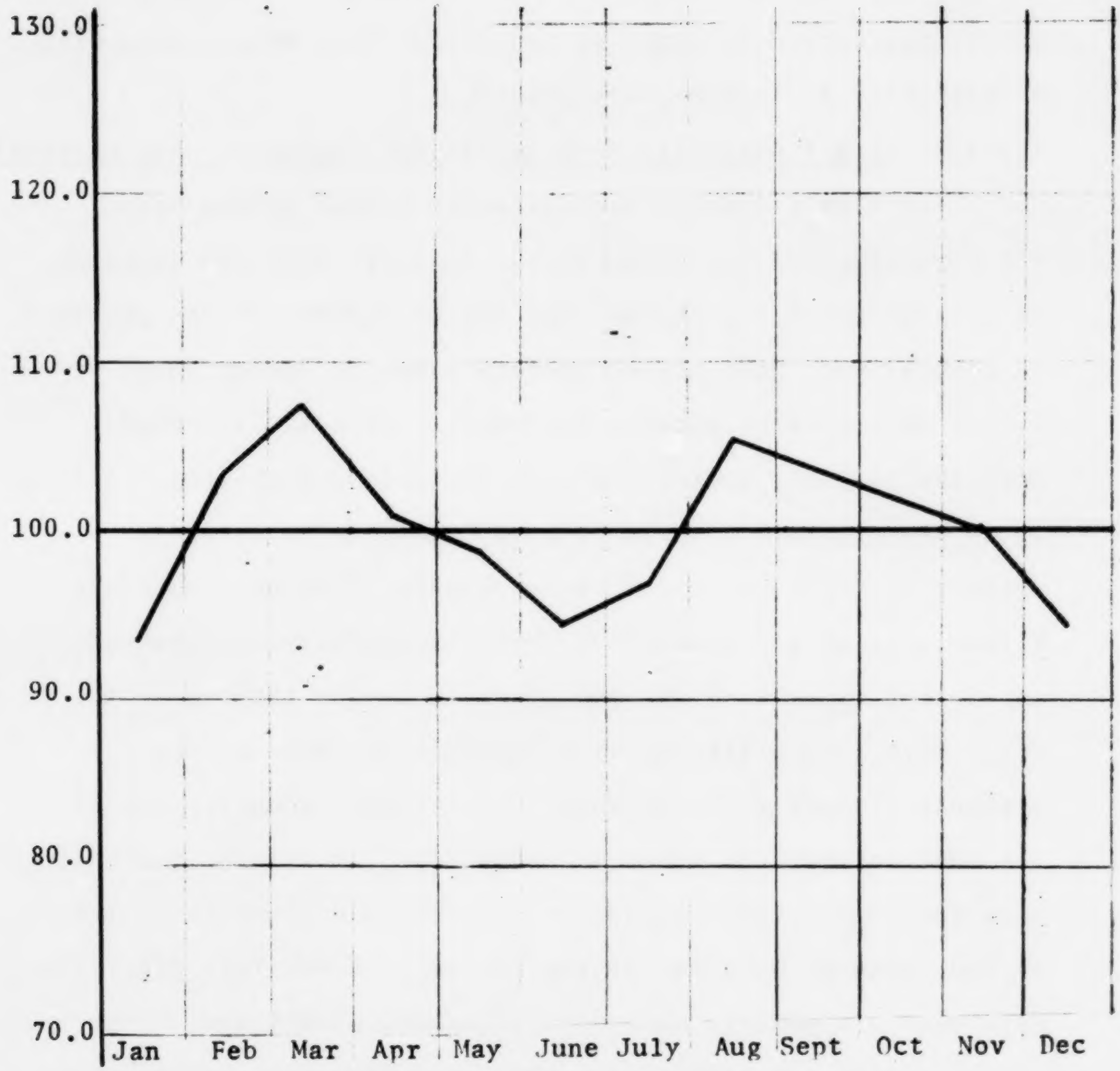


Figure I-3 SEASONAL INDEX OF WORK EFFORT: WOMEN'S OUTERWEAR, N.Y.C.

percentage points above average. The peak to trough fluctuation is almost 14 percentage points. The industry produces two major lines during a year, the Fall and Spring lines, and several minor lines such as cruisewear. The two peaks correspond to production fluctuations of the major lines. As one season ends and another begins, the type of garment produced changes. Since all of a firm's lines are produced from one physical plant, a firm must maintain sufficient production flexibility to easily convert production from one seasonal line to another.

Uncertainty and seasonality require an apparel firm to be flexible. The small firm provides such flexibility. It takes a typical Garment Center firm 3 weeks to complete an average dress. For a large firm producing standard items the required time is 6.2 weeks from the cutting of the fabric to the shipment of the garment. In addition, textile ordering time accounts for 6 weeks, while shipment time represents an additional 5.8 weeks. The small firm can produce a garment in 1/6 of the time.

I.3.1.3. Small Firm Costs and Specialization

Industry entry and exit is not difficult, but it is more difficult than in the past. As an illustration, in the late 1950's approximately $20,000 was required to start a firm. This is a small amount, particularly if it were divided among several partners. Rising prices, reduction in credit availability, and an increase in the minimum size of firms have increased the capital requirements to form a new firm to over $100,000.

Changes in apparel demand can be met through an increase in the number of firms rather than a rise in firm size. When conditions are unfavorable, the establishment will close. When demand is high, new firms will enter the total volume of apparel produced will rise.

The small firm's flexibility provides the advantage of a rapid response to changing demand conditions. There is a cost to this too. Saving due to economies of scale, that is the ability to keep per unit costs low by producing large volumes, can not be reaped by the firm. The constant change of styles during a year and from one year to another, make it impractical for a firm to produce a large volume of any style. By the next season styles might change and the firm would have a large inventory of useless garments. If garments are standardized, economies of scale are feasible. These techniques are difficult to apply in the non-standardized, constantly changing, women's outerwear sector.

Small firms attempt to reduce costs by specializing in just one facet of the production process. Thus, there will be less division of labor. The production process is thus divided among several firms. An apparel firm will order piece goods when needed, from a local wholesaler rather than directly from a mill. By ordering locally, the firm requires less storage space. The cost per yard is slightly higher than ordering from a mill, but the saving in rent more than compensates for this differential. The apparel firm is also able to obtain fabrics faster, providing they are available. Similarly, trim and shipping supplies wholesalers, who basically serve as warehouses for the industry, have developed. The existence of wholesalers enables each firm to maintain a small inventory of the various raw materials which are constantly being replenished by numerous small orders.

The greatest division of labor has occurred within the actual process of garment production. The basic steps of this process are:

a) creation of the styles and the cutting of patterns,
b) sewing of the garment, and
c) shipment of the garment to retailers.

A firm will specialize in just one component of this procedure. The jobber will devote his talents to designing the styles and to the merchandising of the final product. The contractor will specialize in the physical creation, i.e., the sewing of the garment. This system allows each firm to develop expertise in its area. In addition, the system of contracting lowers the overall cost of apparel production.

No firm can accurately predict the demand for its product, particularly apparel firms. A concervatively run firm will hire enough workers to meet the average level of production. If this were not done, the firm would find its workers idle, but drawing full pay when its styles are unpopular, and overworked, and receiving overtime pay, when a hot number is produced. The contractor, on the other hand, can use his labor force more efficiently. When his normal jobber has a slack period, the contractor can take on extra work. The contracting system leads to greater utilization of a worker's time and hence leads to lower labor and apparel costs.

Labor rates are another factor in covered costs. The contractor is usually located close to a source of sewing machine operators. By bringing the work to the laborers, rather than bringing the laborers to the Garment Center, he is able to obtain labor at a lower wage scale.

To produce apparel, each firm needs the presence of other firms to supply its inputs and use its outputs. A jobber must have access to suppliers of piece goods, trim, and shipping supplies. Truckers and retailers have to be within close proximity of jobbers to use this output. Contractors, also, should be accessible. The close linkages and interdependencies of garment firms act as incentives to concentration.

I.3.2.Emphasis on Marketing

I.3.2.1.Industry Concentration

Besides the uniqueness of styling, the other important aspect of apparel production, the emphasis on marketing also encourages concentration of the industry.

Once New York became the dominant center of garment manufacturing, it began attracting fashion buyers to the area. Since many of the leading women's and children's wear manufacturers were located in one area, a buyer could shop around, i.e., see the various styles of the different firms. Hence, a buyer would conserve both money and time. This concentration had the effect of inducing other firms to locate in the area, thus causing a greater and greater concentration.

Since buyers would be less likely to travel to outlying apparel establishments, a firm located outside the Garment Center would be at a disadvantage in attempting to sell its styles. The merchandising aspect, therefore, served as an inducement for firm location within the Garment Center.

Maintaining a presence in the market requires a showroom, a small staff, and possibly the services of one of the principals. Since many apparel firms are small, certain savings can be accrued by consolidating several functions at one location. This would be preferably within the Garment Center, given that a showroom must be maintained there. Having goods under one roof also allows for close supervision of activities by the owners. Thus a typical garment firm will have a receiving room, cutting room, storage area, and showroom all under one roof.

The importance of the buyer to the industry's organization can not be understated. At times, it almost appears as if the whole industry revolves around the buyer. The success of a firm depends crucially on the buyer's reactions. The buyers are literally wined and dined by the manufacturers; bribes are not unknown. In fact, the industry's movement from lower Manhattan to its present location was probably an attempt to obtain prestigious showrooms locations close to the major transportation and entertainment nodes. The dispersal of garment workers to the outlying boroughs was also a contributing factor to the industry's move to a more centrally located area.

I.3.2.2. Importance of Merchandising

An indication of the importance of the merchandising role is shown in Table I-1. It gives the ratio of production workers to total workers engaged in the production of women's outerwear in 1967 for selected areas. The areas discussed concist of counties, Standard Metropolitan Statistical Areas, (SMSA), and Standard Consolidated Areas, (SCA).

The Standard Metropolitan Statistical Area is a statistical construct, created by the U.S. Bureau of the Budget and defines an entire area around a city as one unit because the activities therein form an integrated economic and social system. The SMSA usually consists of one or more contiguous counties containing at least one city with a population of 50,000. Additional counties have to meet certain criteria, relating to metropolitan character and economic integration, before being added to an SMSA. SMSAs may cross state lines. Certain contiguous SMSAs with strong inter-realtionships have been combined to form consolidated areas, SCA. The New York SCA, consisting of the SMSAs for New York and New Jersey, are noted in the Tables of this Report.

In the United States, an average of 874 out of every one thousand employees in women's outerwear are engaged in production. In the New York Metropolitan Region, only 850 workers are similarly engaged; the remainder fulfill various administrative functions. With its greater specialization in the

Table I-1

EMPLOYMENT (TOTAL and PRODUCTION) IN WOMEN'S OUTERWEAR FOR SELECTED AREAS IN 1967

(IN THOUSANDS)

Location	All Workers (1)	Production Workers (2)	Percent Production Workers (3)
United States	409.2	357.6	87.4
N.Y.-N.J. SCA	142.3	120.9	85.0
Jersey City SMSA	8.0	6.8	85.0
Newark SMSA	5.0	4.6	92.0
Patterson-Clifton Passaic SMSA	6.7	6.2	92.5
New York SMSA	119.7	100.6	84.0
Rockland	.5	.4	80.0
Nassau	2.8	2.4	85.7
Suffolk	3.5	3.2	91.4
Westchester	3.6	3.2	88.9
New York City	109.2	91.3	83.6
Bronx	8.1	7.5	92.6
Brooklyn	22.4	20.6	92.0
Manhattan	73.4	58.3	79.4
Queens	4.5	4.2	93.3
Richmond	.8	.7	87.5

Column (3) = Column (2) Divided by column (1)

Source: United States Department of Commerce Census of Manufacturers marketing of women's outerwear , Manhattan has the lowest percentage, (80%), of workers involved in apparel production. The other areas of the Region average almost 90 percent of their workers in production.

For purposes of comparison the following indicates the ratio of production worker to total employment for the manufacturing of women's outerwear of the four SMSAs.

SMSA	Production Workers Total Employment
Fall River, Mass.	90.9%
Philadelphia, Pa.	86.8%
Los Angeles-Long Beach, Calif.	84.2%
Miami, Florida	87.9%

The two Northeastern SMSAs have relatively high ratios, while Los Angeles has a below average proportion of workers employed in production. This may be due to the fact that the latter SMSA is a regional marketing area and thus the merchandising function is relatively more important.

Table I-2 shows the preeminent position Manhattan holds in the marketing of apparel. The garments produced in New York are marketed throughout the nation. Over sixty percent of New York's output is sold within the twenty-five largest Metropolitan areas. The two largest markets are Los Angeles, 8.7 percent, and Chicago, 7.6 percent.

In summary, constantly changing styles require flexibility which is best provided by small firms that in turn depend upon other small firms to supply them with their needs. This dependency

Table I-2

PERCENT DISTRIBUTION OF WOMEN'S OUTERWEAR BY AREA OF DESTINATION

SMSA Destination	New York SMSA Origin
Boston	4.8
Hartford	1.4
New York	3.6
Northern New Jersey	3.5
Philadelphia	3.7
Baltimore	1.9
Allentown	0.2
Harrisburg	0.6
Syracuse	0.9
Buffalo	1.7
Cleveland	2.6
Pittsburgh	1.3
Detroit	3.7
Cincinnatti	0.8
Chicago	7.6
Milwaukee	2.1
Minneapolis	3.3
St. Louis	1.7
Atlanta	2.0
Dallas	1.6
Houston	0.2
Denver	1.7
Seattle	0.2
San Francisco	2.4
Los Angeles	8.7
Other	37.8
Total	100.0

Source: U. S. Department of Commerce, 1967 Census of Transportation and interdependency among the numerous firms lead to concentration by the industry. The other important characteristic of the industry, which is the emphasis on marketing, also encourages concentration by the industry.

I.4. INDUSTRY TRENDS

I.4.1. Employment

The Goods Movement Industry in the Garment Center exists to serve the needs of the apparel industry. The demands placed upon it depend directly on the fortunes of the apparel industry. When the industry is expanding, the goods movement industry will also grow, and conversely, during a decline, it will also decline. To project trends in the goods movement industry, it is necessary to examine the trends of the apparel industry.

Table I-3 shows the number of firms and employees of selected categories located within the Study Area. Almost 50% of the employees within the area are employed by manufacturers of apparel. An additional 20% are employed by apparel-related sectors, such as textile mill products, motor transportation services, and apparel wholesalers. Nearly 30% of the Garment Center apparel workers are employed by the women's outerwear and children's wear segments.

Dress manufacturers represent about 43 percent of outerwear manufacturing, while sportswear accounts for an additional 40 percent. Coat and suit manufacturers and children's wear producers account for the remainder. As the Table indicates, apparel employment in the Garment Center has declined by over 40,000 employees since 1958.

Women's outerwear is the largest subcategory of New York City's apparel industry. (Please see appendix at end of this Chapter for a list of components of New York City's apparel industry and their relative importance.) In 1973, apparel

Table I-3

Employment and Firms by Industry Type Within The Garment Center

Industry	Firms	Employees[1]	Percent	Employees[2]
Textile Mill Products	305	6,037	5.2	5,600
Apparel Products	2,602	47,302	40.7	87,000
Motor Freight Transportation	102	1,794	1.5	---
Transportation Services	4	48	---	---
Wholesale Trade	1,937	16,701	14.4	29,300
Other	3,006	44,345	38.2	---
TOTAL	7,959	116,227	100.0	---

[1] Mayor's Office of Apparel Industry Planning and Development.

[2] Employment distribution in New York City and its central Business District Dept. of City Planning 1961

employment in New York City totaled almost 185,000; of which 85,000, or 46 percent, were employed by the women's outerwear segment. The next largest category, miscellaneous apparel and textile products, employed only 19 percent of apparel workers. Most of the workers in the New York City's women's section, 70 percent, were employed in Manhattan.

Table I-4 indicates the employment trends experienced by the women's outerwear industry in the New York-Northern New Jersey Region during the past two decades. In 1972, approximately 120,000 workers were employed by the industry within the Region, a loss of 40,000 employees from the 1947 level. This represents a decline of about 1 percent per annum. During the same period, national employment in the women's outerwear segment grew by almost 90,000 employees, or an increase of about one percent per annum. The net effect of these two trends has been to reduce New York's share of national employment from one out of every two employees in 1947 to slightly more than 1 out of every three apparel workers in 1972. The areas, accounting for a major proportion of the national growth in employment, were: the Standard Metropolitan Statistical Areas of Los Angeles, Miami, Dallas-Fort Worth, Eastern Pennsylvania, and the Boston-Providence region. Most of the apparel firms located in the small towns of the SMSA rather than in its core. The availability of relatively inexpensive semi-skilled labor, such as the Cubans in Miami, and the growth of population and income in areas with their own native fashions are two of the

Table I-4

Employment in Women's Outerwear
(in thousands)

Location	Year					
	1947	1954	1958	1963	1967	1972
United States	313.4	363.9	360.9	405.5	409.2	404.9
N.Y.-N.J. SCA	164.0	168.7	153.6	151.8	142.3	123.3
Jersey City SMSA	4.5	5.6	6.8	7.5	8.0	8.4
Newark SMSA	(N/A)	5.8	5.7	6.0	5.0	4.5
Patterson-Clifton-Passaic SMSA	5.2	(N/A)	5.9	6.6	6.7	6.5
New York SMSA	(N/A)	147.6	132.5	128.1	119.7	98.4
Rockland	(N/A)	(N/A)	0.4	0.4	0.5	0.3
Nassau	1.3	(N/A)	1.7	2.5	2.8	3.1
Suffolk	(N/A)	(N/A)	2.4	2.9	3.5	3.6
Westchester	3.9	(N/A)	4.0	3.8	3.6	3.0
New York City	139.8*	(N/A)	124.0	118.5	109.2	88.4
Bronx	5.7	(N/A)	8.2	9.3	8.1	6.6
Brooklyn	21.7	(N/A)	22.6	24.6	22.4	18.3
Manhattan	108.5	(N/A)	88.3	79.6	73.4	58.0
Queens	3.6	3.6	4.1	4.1	4.5	4.9
Richmond	(N/A)	(N/A)	0.8	0.9	0.8	0.6

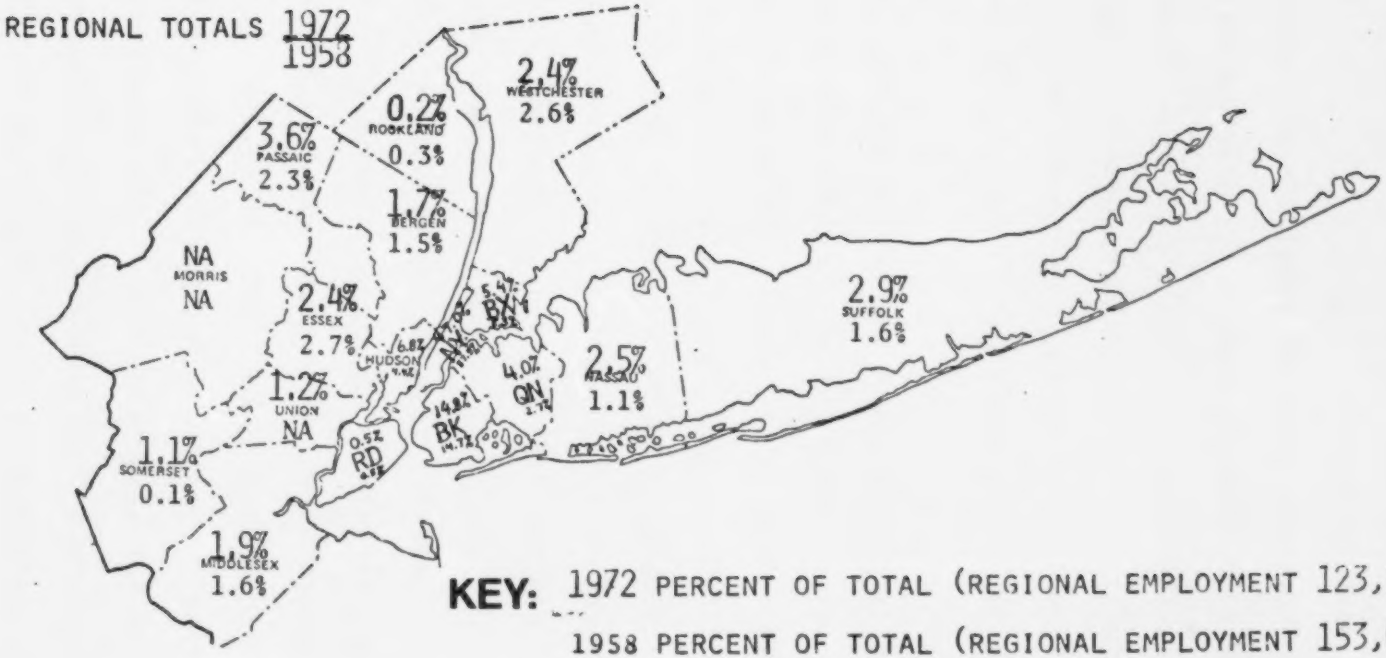
Source: United States Department of Commerce, Census of Manufacturers
County Business Patterns

*estimated

most probable factors responsible for the growth of garment production in the mentioned areas.

Although the Region's share of total women's manufacturing has declined significantly during the past quarter century, the area still maintains a dominant position. Presently it accounts for almost 30% of national employment in women's apparel. The next two largest areas, Los Angeles and Philadelphia, combined represent less than 10 percent of the total number of workers.

A similar pattern of decline and redistribution can also be observed in the local area. During the 1947-1972 period, the Region as a whole lost 40,000 apparel workers, while Manhattan lost over 50,000 jobs. Thus, simultaneously with a decline in total employment, there has been an outward movement of the industry. Figure I-4 indicates the employment pattern experienced by the counties of the Region. The areas, which experienced growth of some significance-both in absolute and relative terms-in the women's apparel employment, were Nassau and Suffolk counties in New York State and Hudson (Jersey City SMSA) and Passaic counties in New Jersey. Within the core of the Region, however, employment declined. It is, as if, employment were being pushed outward from the core. Manhattan's employment has shown a constant decline in the post World War II period of approximately 2 percent per annum. Although experiencing considerable employment losses, Manhattan is still a sizeable employer of the industry's workers. In 1947, Manhattan accounted for 7 out of every 10 workers employed in the Region


REGIONAL TOTALS 1972/1958
3.6%
PASSAIC
2.3%
0.2%
ROCKLAND
0.3%
2.4%
WESTCHESTER
2.6%
1.7%
BERGEN
1.5%
NA
MORRIS
NA
2.4%
ESSEX
2.7%
6.8%
HUDSON
4.4%
5.4%
BX
NY
1.2%
UNION
NA
4.0%
QN
2.7%
14.8%
BK
14.7%
0.5%
RD
1.1%
SOMERSET
0.1%
1.9%
MIDDLESEX
1.6%
2.5%
NASSAU
1.1%
2.9%
SUFFOLK
1.6%

KEY: 1972 PERCENT OF TOTAL (REGIONAL EMPLOYMENT 123,300)

1958 PERCENT OF TOTAL (REGIONAL EMPLOYMENT 153,600)

Figure I-4 WOMEN'S OUTERWEAR EMPLOYMENT DISTRIBUTION IN NEW YORK REGION

by the women's outerwear sector. By 1972, 58,000 or one half of all workers locally employed by women's outerwear worked in Manhattan.

I.4.2. Firms

The same downward trend observed in apparel employment also exists with regard to the firms engaged in manufacturing women's outerwear. As seen in Table I-5, in 1947 almost seven thousand apparel firms existed in the area. By 1972, the figure had dropped to less than 4,000 or a 50 percent decline in a quarter of a century. A majority of the reduction in the number of apparel firms occurred in Manhattan. During the same time span, Passaic County in New Jersey, Nassau and Suffolk Counties in New York State experienced a sizeable increase in the absolute number of apparel firms located within their borders. It is interesting to note that these are the same counties previously observed to have experienced the greatest changes in apparel employment.

The character of apparel firms has changed since the post World War II period. In 1947, an average apparel firm located within the New York Region employed 24 workers; in 1972, it was 34 workers per firm. In fact, employees per firm in 1972 was higher than the corresponding figure in 1947 for every area listed in Table I-5. The rise in employees per firm indicates two trends. Firstly, it has been predominantly the smaller firms that have left the industry, particularly in Manhattan. Secondly, large firms have been established in expanding areas, such as Passaic, New Jersey.

Table I-5

FIRMS ENGAGED IN THE PRODUCTION OF WOMEN'S OUTERWEAR

Location	Total Firms 1947 (1)	Total Firms 1972 (2)	With 20+ Employees in 1972 (3)	Percent Large Firms[1] (4)	Employees Per Firm[2] 1947 (5)	Employees Per Firm[3] 1972 (6)
United States	10085	7973	5340	67.0	31.1	50.9
N.Y.-N.J.	6889	3642	2225	61.1	23.8	33.8
Jersey City SMSA	151	174	131	75.3	29.8	48.3
Newark SMSA	160	104	78	75.0	(N/A)	43.3
Patterson-Clifton-Passaic SMSA	151	146	121	82.9	34.4	44.5
New York SMSA	(N/A)	3273	1860	56.8	(N/A)	30.1
Rockland County	(N/A)	9	8	88.9	(N/A)	33.3
Nassau County	46	67	51	76.1	28.3	46.3
Suffolk County	(N/A)	94	73	77.6	(N/A)	38.3
Westchester County	125	70	52	74.3	31.2	42.8
New York City	6150	3033	1676	55.2	27.6	29.1
Bronx	295	229	154	67.2	19.3	28.8
Brooklyn	1009	583	384	65.9	21.5	31.4
Manhattan	4681	2055	1031	50.2	23.4	28.2
Queens	165	146	95	65.1	21.8	33.6
Richmond	(N/A)	20	12	60.0	(N/A)	30.0

Source: Column (1) and (2) United States Department of Commerce

[1] column (4) = column (3) divided by column (2)
[2] column (5) = column (1) divided by 1947 women's outerwear employment
[3] column (6) = column (2) divided by 1972 women's outerwear employment

A question that should be examined in a future study is the rate of formulation of new firms. How have the changes in labor costs, credit practices, immigration, migration, and imports affected the rate of formation of new firms? New firms normally would replace those that go bankrupt, or that are very successful and move to expanded facilities outside the Garment Center.

Column (4) of Table I-5 shows the proportion of firms in each area with 20 or more employees. Sixty-one percent of the apparel firms in the Region employ more than 20 workers. Passaic County, with almost 83 percent of its firms employing more than 20 employees, has the greatest concentration of large firms,(1) while Manhattan has the largest proportion of small firms in the Region. Only 50.2 percent of its apparel firms employ twenty workers or more. From this information and from the employee per firm data, it appears that the further one travels from Manhattan, the heart of women's outerwear production, the average size of a firm becomes larger.

Within the Garment Center, where numerous and diverse apparel firms exist and where transportation is easy, a firm is in a central location vis-a-vis suppliers of inputs and purchasers of output. The concentration of establishments enables firms

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1. Rockland County has a higher percentage of large firms; however, the actual number of firms is rather low.

to reap the benefits accruing from economies of specialization. This also allows for the existence of smaller firms. As the distance from the core increases, the number and diversity of apparel firms declines. In order to reamin profitable, many more of the firm's functions must be supplied internally. Hence the size of firms is greater, as the distance from Manhattan increases.

I.4.3. Product Value

While employment in Manhattan was declining and the number of firms was diminishing, the value of output produced by a garment worker was rising. Table I-6 shows the value added per employee for the women's outerwear sector for selected areas and years in both absolute and relative terms. As for almost all products, the value of apparel has increased over time due to inflation and to other factors. Removing the impact of inflation and noting the relative standings of counties within the New York Region, each area's value added was expressed as a percentage of the corresponding United States figure. In 1947, a typical apparel worker in the Greater New York Region produced 20 percent more in value than the national average.

An examination of the constituent counties reveals that this high figure was a result of the greater productivity of Manhattan's workers. Their production was 50 percent above average and, thereby, increased the Region's figure. By 1967, the Region's value added rose to 30 percent above the national average. This occurred while the region experienced a 25 percent decline in employment. As Table I-6 shows, the rise in

Table I-6

Value added Per Employee in the Women's Outerwear Section for Selected areas and years

	1947		1958		1967		1971.	
	Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
United States	4558	100.0	5329	100.0	7777	100.0	9609	100.0
N.Y.-N.J. SCA	5496	120.6	6466	121.0	10186	131.0	12895	134.5
Jersey City SMSA	3867	84.8	5662	106.2	10050	129.2	10165	105.8
Newark SMSA	3000	65.8	3649	68.5	5820	74.8	5700	59.3
Patterson-Clifton-Passaic SMSA	3269	71.7	3474	65.2	6672	85.8	8956	93.2
N.Y. SMSA	(N/A)	(N/A)	6828	128.1	10709	137.7	13786	143.5
Brooklyn	3184	69.8	3823	71.7	6469	83.2	----	-----
Manhattan	6708	147.2	8326	156.2	13375	172.0	----	-----
Queens	3361	73.7	3902	73.2	7244	93.1	----	-----
Nassau	2385	52.3	4176	76.4	7214	92.8	----	-----

value added and the decline in employment were even sharper for Manhattan. This data seems to indicate that the reduction in employment was not broad-based. But rather it was due mainly to the emigration of low-priced high-volume producers from Manhattan to the outlying areas. The constant rise in the relative standing of the whole Region vis-a-vis the national average indicates that it is the lower-priced garment production that is expanding in other areas, such as Pennsylvania and Florida.

In summary, the typical garment produced in the Garment Center is produced by a smaller than average firm employing relatively more skilled and more expensive labor. This garment is of better quality and of higher price than the average.

I.5 OUTWARD MOVEMENT OF CONTRACTORS

I.5.1. Division of Activities

The dispersion of apparel firms throughout the New York Region and Middle Atlantic states and the rise in the value of apparel produced in the Region can be explained by an examination of the garment production process. In addition, and somewhat paradoxically, truck traffic in the area rose. The garment production process consists of the following segments:

1. inflow of raw materials,
2. creation of styles, and their cutting,
3. production (sewing) of garments,
4. merchandising of garments, and,
5. shipment of garments to retailers.

The minimization of costs of each segment of the production process can, in theory, occur at a different location. The sewing of garments, which requires a relatively large amount of labor, should locate in areas, where cheap labor exists. The shipping of garments, which requires a relatively large amount of land, should be located in an area where rentals are relatively low. The two locations are not necessarily identical. Small firms, not having the benefits of specialization, must perform all five functions at one site. Such a firm would select a location where its over-all costs are minimized. Once a division of labor is introduced, the physical separation of the five stages of apparel production becomes feasible. Each stage can then locate in those areas where its profit margins are highest. The total cost of a producing a garment would naturally be somewhat lower.

Locations, however, can not be anyplace. Physical movement of goods in process is still necessary between the various production steps. Firms are forced to remain within easy access of other firms. The link between segments is provided by transportation i.e., the trucking firms that service the garment industry and also the hand-operated vehicles, e.g., pushcarts. Most phases of the garment production, however, have stayed together.

The contractor system, i.e., the sewing of garments, is the segment that has taken the greatest advantage of the development of task specialization. In the creation of a garment, the development of a style and its merchandising are of primary importance. The sewing of a garment could be delegated to an outsider. Thus, a jobber keeps the primary functions under his control and allows the contractor to sew the garments. The contractor, specializing in the sewing of garments, uses a relatively large amount of labor and land. The contractor will therefore tend to gravitate towards those areas, where these factors are relatively inexpensive. Within the Garment Center, contractors will tend to locate on the periphery, that is, west of Eighth Avenue and south of 34th Street. Although wage rates within the area are relatively constant, rental rates fluctuate considerably. Rental rates for contractors on the periphery are approximately one third of those in the Core of the Garment Center. Outside the Garment Center, contractors will locate in areas where pockets of cheap labor exist such as Chinatown in Lower Manhattan or Wilkes-Barre, Pennsylvania. By moving out of New York City, a contractor can reduce his costs significantly.

I.5.2 Relative Wage Rates

Wages in New York City are approximately 20 percent higher than in the surrounding areas, as seen in the Table below.

APPAREL WAGES IN SELECTED AREAS AS A PERCENTAGE OF NEW YORK CITY WAGES (1970) (1)

New York City	100.0
Jersey City SMSA	90.8
Newark SMSA	76.9
Paterson-Clifton-Passaic SMSA	90.2
Perth Amboy	85.4
Nassau&Suffolk Counties	89.5
Wilkesbarre-Hazelton, Pa.	78.8

Large pools of such labor were to be found in small semi-urban areas, in the vicinity of Boston, Massachusetts and Wilkes-Barre, Pennsylvania. These areas were experiencing declines in other activities and had reserves of cheap labor, as reflected in their wage levels.

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(1) As referred to in Table I-7.

Table 1-7

Hourly Apparel Wages In Selected Areas Relative To New York City's Apparel Wages

Year	New York City		United States	Miami SMSA	Wilkes Barre SMSA	Jersey City SMSA	Newark SMSA	Paterson Clifton Passaic SMSA	Perth Amboy	Nassau & Suffolk
	Hourly Wages	Per Cent								
1970	3.16	100.0	75.6	72.5	78.8	90.8	76.9	90.2	85.4	89.5
1965	2.39	100.0	76.6	72.4	73.2	91.2	83.7	87.9	82.4	83.7
1960	2.14	100.0	74.3	--	66.4	88.3	79.9	85.0	79.4	74.8
1958	2.05	100.0	75.1	--	--	87.8	80.5	83.4	77.1	71.2

Source: United States Bureau of Labor Statistics

In addition, the shrinkage of New York's skilled and unskilled apparel labor pool is due to several factors: less immigration from abroad and less migration from the South, the greater attractiveness of alternative occupations, and the aging of the present apparel work force. All of this contributed to the outward movement of New York City's Garment Industry. The outward migration of apparel firms has been concentrated in the industry's lower-priced segments. This portion requires less-skilled labor and employs relatively large-volume production techniques. The high-price, high-fashion styles, requiring highly-skilled laborers are forced to stay in the Garment Center area where the necessary labor is plentiful. Thus, as lower-priced firms have moved out, the average value of items produced in the area has risen.

The contractor, however, can not move too far from the Garment District. Contractors must still maintain links with the jobbers. This is of vital importance, since contractors obtain cut goods from jobbers and ship the hanging garments to jobbers. The truck is utilized for both these functions. As new highways have been built, and as highways speeds have increased, previously inaccessible areas have opened up. And garment manufacturing has developed. Presently, Garment Center jobbers have contractors located as far away as Virginia and Vermont;(1) all within one day's drive of New York. The movement of contractors out of the area has simultaneously resulted in an increase of truck activity in the area. Shipments previously performed within buildings and within the District by handcart are now moved by truck throughout the Northeast. Thus the paradoxical result that, although apparel employment in the area has declined, congestion has increased.

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(1) Some firms have even begun to ship cut goods by air to Puerto Rico and to Columbia, South America.

I.6. FUTURE TRENDS

The future of New York City's Garment Center will be affected by the same forces that have contributed to the post World War II decline in New York City's dominance of the women's apparel industry. Although the magnitude of employment change is difficult to estimate, the general direction can be discerned.

I.6.1. The Role of Wages

The large inflow of both skilled and unskilled labor, that created and sustained New York's apparel industry, has been virtually eliminated. Immigration of workers with garment-making skills has tapered off since the mid 1920's. Migration from the South and Puerto Rico has also declined. In addition, competition for cheap labor by the Region's other industries has made apparel occupations less and less desirable. In 1955, an apparel worker in New York City could expect to earn $1.88 an hour, while the average hourly wage rate in manufacturing for the SMSA was $1.90. In 1970, the average hourly wage of an apparel worker was only 92.7 percent of the average manufacturing wage rate, a decline of 6.2 percentage points since 1955 in apparel's relative earning power. Thus, a worker could earn $.25 more per hour by being employed in a non-apparel industry. The apparel industry's inability to provide a wage competitive with other industries means that fewer people would be willing to work in the garment manufacturing sector.

While the apparel industry has become less remunerative than other industries in the Region, apparel wages in New York have not grown as fast as apparel wages in some other areas. Table I-7 shows the relative apparel wages for selected areas. Hourly apparel wages in New York have been remarkably constant relative to national wages; approximately one third higher. New York's garment workers have higher wages than those working in the surrounding regions; the differential, however, is narrowing. In the 1950's, New York operators were earning about 25 percent more than their counterparts in the Region. By 1970, the figure was only 15 percent higher The advantage to firms of moving into the outer reaches of the Region and thereby obtaining cheaper sources of labor is greatly diminished, although it still exists.

However, savings in labor costs can be obtained providing a firm is willing to move its production entirely out of the area. A move to Wilkes-Barre, Pennsylvania would reduce labor costs by 20 percent, while a move to Miami would save 30 percent. This type of a move, however, implies an almost total severence of ties with New York's Garment Center, a tradeoff many firms may not be willing to make. In addition, greater unionization activity and increases in minimum wages in areas outside New York should reduce the labor differential between New York and other Regions.

Over the last decade the incentive for apparel firms to relocate within the Region has lessened somewhat. Areas outside the Region, such as Miami, still offer sizeable potential reduction in labor costs. The supply of labor to the industry, however, has declined within the Region as better earning opportunities have developed in other industries. The pressures on firms to relocate outside Manhattan have declined. Correspondingly, the outflow of firms can be expected to slow down. In addition, most of the production of garments, i.e., the actual sewing process, has already moved out of the Garment Center area. Only about 15 percent of garments are still sewn here.

I.6.2. The Role of Technology

The future impact of changes in transportation and in wage rates appear minor, when compared to the possible effect of technological improvements. Although precise possible improvements can not be predicted, clues as to the kind of changes that may occur can be provided by an examination of the characteristics of the garment producing process. Apparel being produced in stages by firms under different ownership means that the cost and locational impacts of technology and innovation might affect only a segment of the industry, rather than the whole apparel industry.

Suppliers of inputs to garment production, such as piece goods and trim, require face-to-face communications with their customers. Typically an apparel firm will send a swatch to a wholesaler and ask for identical material or matching trim. Such transactions are best handled when firms are in close proximity to the ordering departments of apparel firms. This is why suppliers or their representatives locate near concentrations of apparel firms.

The development of a system similar to Bell Telephone's Picturephone would have a dispersal effect on these suppliers. However, one major hurdle to be resolved with this type of a system would be conveying the tactility and the color of the material and other supplies. Piece goods, trim, other suppliers could locate where their costs (exclusive of communications) are minimized. They would, however, have to locate in areas where transportation to apparel firms can be provided inexpensively and quickly, at least twice a day.

The creation of styles and the marketing of garments lie at the heart of women's outerwear production. The owners are loath to relinquish control of these functions. Designers, artists, sample makers, and others have congregated in large metropolitan areas, principally New York. Original design work would, therefore, follow this pool of labor. The cutting of piece goods into the styles developed by a firm has also tended to be done by jobbers at their own facilities. Close supervision of cutting operations allows for last minute changes in styling. Supervision also insures that the cutter does not cut the patterns too loosely, thereby wasting cloth, nor too snugly. This is why most cutting is done on a firm's premises rather than at the contractor's. Jobbers, therefore, locate not only their showrooms, but also cutting room operations, within the Garment Center where the firm's principals are located.

The vast majority of piece goods are cut into dress sections within the Garment Center. However, many jobbers also delegate the actual cutting of the textile to the contractors. Textiles are shipped to the Garment Center, the jobber takes possession, and ships them with cutting patterns to the contractor. The jobber performs no work on the textiles.

Although there is no physical need, the textiles must be transported from the mill to the Garment Center then to the contractor. It may be possible to eliminiate these movements and skip the extra truck trips of uncut textiles into and out of the Garment Center. New applications of control and communications technology are required to effectuate such a change.

There exists the potential for using computers to cut piece goods into desired styles. The technology is already available. Levi's is employing lasers controlled by computers to cut jeans. The saving in labor costs would be sizeable; New York City cutters were earning approximately $5.00 per hour in 1971.

The small size and high mortality rate of firms would make the installation costs of a sophisticated data processing system appear to be prohibitive. Per unit cost of automation would be very high because the quantity of styles created is usually small, ranging from a few hundred to several thousands. And they change from year to year and season to season. Levi's styles, on the other hand, are the same, year in, year out; the jeans produced in the mid-nineteenth century are virtually identical to the ones presently produced. Also, the quantities produced are sizeable. Over the long run, the high costs of technology are recovered.

A possible solution lies in time sharing, that is, a computer company is organized and several apparel firms contract to use its capacity. This, in a sense, is similar to the system of contracting, that is the sewing of garments presently utilized by the industry, wherein a fixed labor pool is available and used by several firms.

The plan's main deficiency is the inadequate protection of style patterns. A skilled programmer might be able to pirate a firm's pattern from the computer and produce garments almost as fast as the style's originator.

I.6.3.The Role of Marketing

Manhattan's role, as the marketing center of the United States apparel production, was previously noted. Manhattan has a preeminent position in the merchandising of apparel and will most probably maintain a dominating statue in the future. However, some lessing of its merchandising power seems inevitable.

During the past several years, new apparel marketing centers, open year-round, have sprung up. The major areas are Atlanta, Miami, Chicago, Dallas, and Los Angeles. The effect of these markets has been to diminish the merchandising function of New York because apparel buyers no longer have to travel to the Garment Center in order to see the latest fashions. The development of regional markets also affects locational decisions of firms, particularly the smaller ones. It no longer becomes essential for such a firm to locate in Manhattan; the firm can be established almost anywhere. And, during market weeks, i.e., the period when new apparel lines are shown, the firm would rent space in each of the regional marts and thus reach potential buyers. The competitive impact of these centers is presently small. One way of measuring the relative competition is by looking at the amount of space devoted to showrooms. The

Table below shows the maximum square footage in each of the areas. Over 80% of the showroom space is located in the study area.

City	Showroom Space (Sq. Ft.)
Atlanta	500,000
Chicago	1,500,000
Dallas	1,300,000
Los Angeles	2,000,000
Garment Center	17,000,000

Source: Mayor's Office of Apparel Industry Planning and Development

There are certain advantages to locating within Manhattan, but the establishment of competing centers somewhat diminishes those advantages.

The shipment of goods can be performed from any warehousing facility with a small staff. However, since many apparel firms are small, savings can be realized if this shipping function were combined with other receiving and shipping functions of the firm. The small and intermediate sized firms will therefore have one location from which all activities emenate. Large firms, having sufficiently large volumes such as Johnathan Logan, can maintain separate shipping facilities, most probably adjacent to the New York area.

The continuing decline in the number of firms and employees located in the area would therefore appear to be a trend in women's outerwear. This, however, does not mean that the women's outerwear industry will disappear from the New York Region. But there will be quantitative and qualitative changes. One major advantage for the Garment Center is that it is situated in an area, which has a ready-made built-in market. The area consists of 16.2 million persons, 8 percent of the United States population, of which 52.5 percent are women. Per capita income in the area in 1970 was $3898 as compared to the national average of $3119. The area accounts for about 10 percent of the nation's income. In addition, many of the Region's residents are high income earners; 30 percent earned more than $15,000 per annum. In the United States as a whole only 20.6 percent of the population earned more than $15,000 in 1969. The area, thus, has the demand and the purchasing power to maintain an endogenous apparel industry. This coupled with the fact that location-wise it is advantageous to be in the New York area will insure the existence of the industry. However, its domineering position will of necessity deteriorate over time.

I.7 APPENDIX

Standard Industrial Classification System, (S.I.C.)

The Federal Government has developed a system of classifying manufacturing firms into industry groups by the product or service produced. This system is known as the Standard Industrial Classification System, (S.I.C.). The S.I.C. code classification spans the gamut of economic activity. They are most frequently used in manufacturing. The basic level of code designation is the two digit or Major Group level. These two digit Major Groups range numerically from the Major Group 19, which is Ordance and Accessories to Major Group 90, which is Government. Manufacturing activities are covered in Major Groups 19 through 39, while non-manufacturing activities are covered by the remaining higher-numbered two-digit code groups. Increasing levels of refinement are obtained by increasing the number of digits in the code number.

Most apparel manufacturing establishments are included in Major Group 23, Apparel and Other Finished Products Made From Fabrics and Similar Materials. Within this two-digit major group there are 9 three-digit sub-groups, many of which are in turn divided into even more refined four-digit groups.(1)

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(1) For illustrative purposes, the code headings and titles of Major Group 23 have been included immediately following this generalized description of the Census Classification System. Although many activities are to be found in the Garment Center, most will be classified within S.I.C. codes 233 and 236. Much of the remaining activities will originate in apparel linked sectors, such as Textile Mill Products, S.I.C. 22, and Transportation Services, S.I.C. 42.

(For example, one of the three-digit sub-groups within Major Group 23 is Sub-Group 233, Women's and Misses Outerwear. This sub-group contains six four-digit refined divisions: 2331-Blouses; 2335-Dresses; 2337-Women's Suits, Coats and Skirts; and 2339-Women's Outerwear, not elsewhere classified).

Major Group 23-Apparel and Other Finished Products Made From Fabrics and Similar Materials

This group, known as the needle trades, includes establishments primarily producing apparel and fabricated products by cutting and sewing purchased woven or knit textile fabrics and related materials such as leather, furs, and plastics.

231 Men's, Youth's and Boys' Suits, Coats, and Overcoats
232 Men's, Youth's and Boys' Furnishings, Work Clothing, and Allied Garments
233 Women's, Misses', and Juniors' Outerwear
2331 Blouses, Waists, and Shirts
2335 Dresses
2337 Suits, Skirts, and Coats
2339 Women's, Misses' and Juniors' Outerwear, N.E.C.
234 Women's, Misses', Children's and Infants' Outergarments and Undergarments
235 Hats, Caps, and Millinery
236 Girl's, Children's and Infants' Outerwear
237 Fur Goods
238 Miscellaneous Apparel and Accessories
239 Miscellaneous Fabricated Textile Products, N.E.C.

II APPAREL INDUSTRY QUESTIONNAIRE

II.1 INTRODUCTION

Within the Garment Center Study Area, the 1973 Dun & Bradstreet data lists 2,600 firms with 47,300 employees that are directly involved in the production of finished garments as manufacturers, jobbers or contractors. An additional 1,159 firms with 11,800 employees are directly involved in the wholesale supplying of piece goods, trim and notions. Each of the mentioned firms contributes to and is directly affected by the goods movement system.

The purposed of the Apparel Industry Questionnaire was to develop data on shipment flows with an emphasis on the apparel and piece goods industry's view of the goods movement system. The type of information collected included:

- Employment
- Area of Establishment
- Functions Performed at Location
- Origins and Destinations of Supplies, Cut Goods, and Shipped Goods
- Frequency of Deliveries and Shipments
- Reliability of Service

The data collected from the apparel questionnaire has been summarized in detail in the exhibits in this chapter. The important findings are presented in the body of this chapter.

II.2 METHOD OF DATA COLLECTION

Prior to the selection of firms to be interviewed, meetings were held with industry association officials, labor officials and The Mayor's Office of Apparel Industry Planning and Development. Background statistics were also obtained from the 1969 Dun & Bradstreet data. From the material mentioned, a general consensus developed that the Garment Center consisted primarily of apparel firms classified as jobbers. The other two types of firms, manufacturers and contractors, were believed to be very limited in their occurrence within the Garment Center.

Based on the background information obtained and also on the survey of data previously obtained as part of this study, a suitable questionnaire was developed for the various categories of apparel or apparel related businesses. Sample interviews were conducted by Kurt Salmon Associates, and New York City Transportation Administration personnel. Other agencies and associations, having an interest in the study, also contributed to the questionnaire.

After the questionnaire was finalized, appointments for face-to-face interviews were set up through the appropriate industry associations. A plan, considering firm type and level of employment, was utilized to assure that a broad cross section of the apparel industry would be sampled.

The majority of the interviews were conducted by New York City Transportation Administration personnel assisted by college students. Kurt Salmon Associates participated in the interview process, reviewed each questionnaire for data clarification required, and summarized the data from the interviews. The number of interviews was restricted due to available manpower and less than encouraging assistance from selected industry associations.

II.3 SUMMARY OF OBSERVATIONS

A total of 72 interviews were conducted with the principals and executives of apparel firms. Operating personnel were also present at selected interviews to assist in completing the questionnaires. The total interviews by type of firm were as follows:

Apparel Firm Type	Number of Interviews
Ladies' Sportswear	15
Ladies' Dresses	25
Ladies' Coats and Suits	5
Children's Wear	7
Piece Goods Suplliers (rolled cloth)	9
Trim and Notion Suppliers (thread, zippers, buttons)	7
Shipping Supplies Suppliers (hanger, polybags, cartons)	4
Total	72

The firms are further classified as jobber, manufacturer or contractor in Exhibit I. The type of information obtained during each interview is shown in Exhibit II.

II.4 GENERAL CHARACTERISTICS

II.4.1 Functions Performed at Location

The functions performed at the location of the interview are presented in Exhibit V. The functions were not dependent upon product produced, but rather on the firm's classification as a manufacturer, jobber, contractor or supplier.

The suppliers would receive, warehouse, and then ship their product. The piece goods suppliers interviewed typically had offices and showrooms. One-half of the trim and notion suppliers interviewed had showrooms. The contractors interviewed received cut goods and trim re required for garment assembly from the jobbers. One of the eight contractors indicated that he received both piece goods and cut goods from the jobber and performed the cutting function when required. After the assembly operation, the finished or sewn goods are returned to the jobber.

The jobbers and manufacturers interviewed typically received piece goods and warehoused piece goods in anticipation of cutting requirements. Piece goods would then be cut into the garment components prior to the assembly operation. The jobbers and manufacturers also received trim and notions required prior to the assembly operation.

The trim and notions were received on such a frequent basis as to typically not require storage. The jobber sends the cut goods, trim and required hangers, and protective polybag covering to the contractor for assembly, while the manufacturer performs the assembly operation in his own facility. Sixteen percent of the firms interviewed indicated they sent piece goods rather than cut goods to the contractor.

The jobber receives finished goods back from the contractor. Both the jobber and manufacturer warehouse the finished goods prior to shipment against customer's orders. The jobber and manufacturer receive shipping supplies from the supplier. The supplies are utilized in the packing of the garment in preparation of shipment. With frequent deliveries of shipping supplies, less than one-half of the forms indicated that storage space was required for the supplies.

The jobbers and manufacturers typically made their own patterns and sample garments. The firms also typically had showrooms and offices at the location interviewed.

Several of the jobbers had more than one facility. One facility would be utilized for receiving piece goods, trim and notions, and cutting of piece goods. The second facility would warehouse the finished products and contain the showroom. It is believed that the division of facilities would not affect the goods movement system.

II.4.2 Wholesale Value of Product

The wholesale value of the product varied depending upon the industry. The range of values is presented in Exhibit III with the average presented on the next page.

Apparel Firm	Average Wholesale Value Per Garment
Ladies' Sportswear	$10.65
Ladies' Dresses	$22.55
Ladies' Coats and Suits	$60.20
Children's Wear	$14.60

Garments classified as children's wear include shirts, blouses, dresses, coats and suits, sportswear, and other outerwear.

II.4.3 Annual Units Shipped

The number of units shipped annually is believed to be a function of the level of employment and the wholesale value of the product. The relationship would, of course, be different for jobbers, manufacturers, and contractors. The relationship between units shipped, wholesale value, and employment level were explored during the construction of the macro and micro models depicting the goods movement flow.

From Exhibit VIII, the average annual shipments per employee are shown below:

Apparel Firms	Average Annual Shipments
Ladies' Sportswear	20,600 units
Ladies' Dresses	9,300 units
Ladies' Coats and Suits	1,800 units
Children's Wear	8,110 units
Ladies' Dress Contractors	775 units
Piece Goods Supplier	1,100 rolls
Trim and Notion Supplier	$47,700[1]

II.4.4 Area and Employment

The employment characteristics of the firms interviewed are presented in Exhibit VI. The area characteristics of the firms are presented in Exhibit IX. The area of the firm (in square feet) per employee was derived in Exhibit X and summarized on the following page.

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[1] Because of the number and small size of the trim and notions deliveries, units were not given.

Apparel Firm	Area of Firm Per Employee (Square feet)
Ladies' Sportswear	450
Ladies' Dresses	425
Ladies' Coats and Suits	385
Children's Wear	295
Dress Contractors	50
Piece Goods Supplier	880
Trim and Notions Supplier	310
Supplier of Shipping Supplies	1,040

With offices, showrooms and warehousing typically on the jobbers' premise, one would expect a greater area required per employee than at a manufacturer's facility. The sewing or assembly operation at the manufacturing facility requires less than 100 square feet per employee.

II.4.5 In-Process Time

The garments produced by the Garment Center firms are typically made to order. A short in-process time from cutting to shipping is then very desirable to enable the firm to maintain its competitive advantage in being able to ship the garment within a short time after receiving the customer's order. The data presented in Exhibit IV indicates that one-third of the firms required

2 weeks or less between cutting piece goods for garment assembly and shipment to customer. Three-fourths of the firms indicated that three weeks or less was required.

II.5 SOURCES OF SUPPLIES

II.5.1 Piece Goods

The sources of piece goods did not vary substantially between types of apparel firms. The source of piece goods for jobbers and manufacturers is summarized below from Exhibit XVI.

SOURCE OF PIECE GOODS

	Apparel Firm			
Location of Source	Sportswear	Dresses	Coats & Suits	Children's Wear
Within Garment Center	2%	17%	10%	8%
Within Commercial Zone	9%	23%	10%	4%
Beyond Commercial Zone	89%	60%	80%	88%
Total	100%	100%	100%	100%

Seacaucus, New Jersey, Patterson, New Jersey and the State of New Jersey in general were the most frequently mentioned sources within the Commercial Zone. Beyond the Commercial Zone, the South and New England were most frequently mentioned. Transportation charges were paid by the firm for piece goods from beyond the Commercial Zone. The supplier absorbed the transportation charges for piece goods delivered from the Commercial

Zone or Garment Center. The apparel firm's pushboys did not assist in transporting the piece goods from the street level, but rather the trucker or the piece goods supplier did. The apparel firms averaged 8 deliveries per week of piece goods. The piece goods supplier's sources and destinations of shipments were recorded during the interviews and summarized below from Exhibit XVIII.

Location	Originations	Destinations
Within Garment Center	0%	68%
Within Commercial Zone	30%	24%
Beyond Commercial Zone	70%	8%
Total	100%	100%

Patterson, New Jersey and the State of New Jersey in general were the most frequently mentioned sources within the Commercial Zone. The South and New England were mentioned for sources beyond the Commercial Zone. The most frequently mentioned destinations in the Commercial Zone were Brooklyn, Bergen area, and New Jersey in general. For shipments beyond the Commercial Zone, California, Texas, and Florida were most common.

The suppliers(1) pay transportation charges for receipts from beyond the Commercial Zone and for shipments handled by local truckmen within the Garment Center and Commercial Zone. The

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1. Includes piece goods, trim and notions, and shipping supplies.

use of pushboys for shipments by the supplier is summarized from Exhibit XV.

SUPPLIER'S(1) USE OF PUSHBOYS FOR SHIPMENTS

Destination	His Pushboys	Other Than His Pushboys	Total
Within Garment Center	97%	3%	100%
Within Commercial Zone	61%	39%	100%
Beyond Commercial Zone	47%	53%	100%

Pushboys(1) will be used for delivery of piece goods directly to the customer or assist by taking the delivery to the specified transportation company as specified by the customer or as indicated by customer's location. It was estimated, that for every employee of the supplier's firm, a weekly average of 8.95 hours per employee was directly involved with the goods movement on the street.

The type of freight firm used by the piece goods supplier for the shipment of piece goods is summarized on the following page from Exhibit XVII.

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1. Includes piece goods, trim and notions, and shipping supplies.

FREIGHT FIRMS UTILIZED FOR SHIPMENT OF PIECE GOODS FROM PIECE GOODS SUPPLIER

	Freight Firm Classification						
Destination	Common Carrier	Local Truckmen	Private Truckmen	Freight Forwarder	UPS	Air Freight	Total
Within Commercial Zone	33%	65%	0%	1%	1%	0%	100%
Beyond Commercial Zone	35%	37%	0%	5%	19%	4%	100%

The Supplier(1) uses his pushboys for delivery of piece goods within the Garment Center.

II.5.2 Trim and Notions

The apparel firms indicated that the sources of trim and notions were nearly equally divided between the Garment Center and the Commercial Zone. The supplier absorbed the transportation charges for supplies delivered from the Garment Center or from the Commercial Zone. The apparel firm's pushboys did not assist in transporting the supplies from the street level, but rather either the trucker or trim and notions supplier did. The frequency of delivery ranged from one to eight times daily from differing suppliers and averaged three deliveries daily.

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1. Includes piece goods, trim and notions, and shipping supplies.

Unless otherwise arranged (e.g. late air freight shipments), the apparel firm absorbs the local truckmen's charge for deliveries to stores, distribution centers, or freight terminals within the Garment Center and the Commercial Zone. The other freight charges are billed to the customer.

As noted in the freight firm usage Table previously presented, UPS and the local truckmen process the major portion of the finished goods shipments. For a small fee, UPS visits the firm daily for pickups without being notified. UPS will generally arrive during the same time period each day. The apparel firm is typically served by a single local truckman and has little flexibility to change truckmen. The apparel firm will either call the truckman during the previous afternoon or in the current morning to request a pickup. The apparel firm maintains a record of services provided by UPS and the local truckman and is billed separately by each. The apparel firms averaged a total of 11 pickups per week for finished goods shipments. Each pickups may consist of multiple customer shipments.

The apparel firms indicated that they believed the service provided by the transportation firms to be reliable.

II.8 CHARACTERISTICS OF FREIGHT

Handcart activity observations have been previously presented in detail in the Handcart Activity Observation report.

The previous report dealt with observations made during street and elevator surveys. Additional information was obtained during the apparel industry interviews and is being presented to supplement the previously collected data.

The basic types of handling equipment utilized in the movement of goods on the street includes:

- Person (for small light loads)
- 2 Wheel Handcart
- Pipe Rack
- Box Rack
- Piece Goods Truck
- Platform Truck

The above handling equipment is illustrated in Exhibit XX.

II.8.1 Piece Goods

Piece goods are transported on 2 wheel hand trucks, piece goods trucks, and platform trucks. The piece goods truck is predominate with approximately 80% of the piece goods volume.

Piece goods shipped to apparel firms from the Garment Center are predominately loose rolls. A mixture of loose rolls and cartons of piece goods are shipped from within the Commercial Zone. Piece goods shipped to apparel firms from beyond the Commercial Zone are predominately in cartons with an average of 6 rolls per carton.

The average observed quantity transported per cart is as follows:

Truck Type	Cartons	Rolls
2 Wheel Hand Truck	1.7	5.3
Piece Goods Truck	3	13.0
Platform Truck	3	13.0

II.8.2 Trim and Notions

Trim and notions are transported by individuals and 2 wheel trucks. The individual is used 75% of the time with the 2 wheel hand truck utilized the other 25% of the time. Trim and notions are typically packed into small cartons.

The observed quantities transported are as follows:

Truck Type	Cartons
2 Wheel Hand Truck	6.5
Individual	1.5

II.8.3 Shipping Supplies

Cartons are transported by 2 wheel hand trucks and platform trucks in 100 lot quantities.

II.8.4 Shipped Garments

Garments being shipped to customers are either loose on hangers or boxed as follows:

Destination	Percent Loose Hangers	Percent Boxed	Total
Within Garment Center	98%	2%	100%
Within Commercial Zone	60%	40%	100%
Beyond Commercial Zone	3%	97%	100%

Individuals, 2 wheel hand trucks, pipe racks, and box racks are utilized in the transport of garments. The individual and box rack are capable of transporting both boxed and loose hanging items. The 2 wheel truck is capable of transporting boxes only; the pipe rack hanging items only. With the box rack being predominate, the box rack and pipe rack combined are used approximately 90% of the time.

The 2 wheel hand truck averages 11.5 boxes per trip. The quantity of hanging garments per box rack or pipe rack is dependent upon the product as follows:

	Sportswear	Dresses	Coats & Suits	Children's Wear	
				Coats	Other
Quantity of Hanging Garments per Truck	280	240	40	50	400

The information contained in this chapter were combined with other project results in the preparation of macro and micro scale models, depicting the goods movement system of the Garment Center.

CHAPTER II:

APPAREL INDUSTRY QUESTIONNAIRE

EXHIBITS

EXHIBIT I

APPAREL FIRMS INTERVIEWED

Apparel Firms Interviewed[1]	Apparel Firm Classification				
	Jobber	Mfg.	Potential Mfg. Capability	Contractor	Total Firms
Ladies' Sportswear	12		2	1	15
Ladies' Dresses	16	3		6	25
Ladies' Coats and Suits	4		1		5
Children's Wear	3	2	1	1	7
Piece Goods Suppliers					9
Trim and Notion Suppliers					7
Shipping Supply Suppliers					4
Total	35	5	4	8	72

(1) Includes facilities with showrooms only.

EXHIBIT II

INFORMATION AVAILABLE FROM QUESTIONNAIRES

Date: July 8/74
Revised: Aug. 22/74
Revised: Sept. 16/74

Question Outstanding to Correct Questionnaire	Interview Number	Avg. Warehouse Price	Building Area	No. of Employees	Shipped Goods					Piece Goods					Cut/Finished Goods					Trim/Notions					Shipping Supplies					Comments
					Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	
Sportswear	1	x	x	x		x		x	x		x		x			x		x												
	3	x	x	x	x	x	x	x	x	x						x	x	x	x											
	12	x	x	x	x	x	x			x	x	x	x			x	x	x	x		x	x				x	x			
	18	x	x	x	x	x	x			x	x		x																	
	19	x	x	x	x	x	x	x																						
	25	x	x	x																										Showroom only.
	20	x	x	x		x	x	x				x																		Outside garment center.
	31	x	x	x	x	x	x			x	x	x		x																
	30									x																				
	34	x	x	x	x		x	x								x	x	x	x		x	x		x		x	x		x	
	52	x	x	x	x		x			x	x	x				x	x	x												
	51	x	x	x			x																							
	48	x	x	x	x	x																								
	19			x												x		x												
	42	x	x	x	x	x	x	x	x							x	x	x											x	
Dresses	4	x	x	x	x	x	x	x								x	x	x												
	5	x	x		x	x	x	x		x	x	x		x							x		x	x						
	2	x	x	x	x		x	x		x	x	x		x							x		x	x						
	DT-1	x	x	x	x	x	x																							
	DT-2	x	x	x	x	x	x			x	x	x				x	x	x												
	14	x	x	x	x		x	x																						
	17	x	x	x	x	x	x	x								x	x	x												
	21	x	x	x	x	x	x			x	x	x		x																
	22	x	x	x	x	x	x	x		x		x																		
	13	x	x	x	x	x	x	x		x	x	x				x	x	x												
	23	x	x	x	x	x	x	x													x	x	x	x						
	26	x	x	x	x		x	x		x						x														
	32		x	x	x	x	x	x		x	x	x																		
	38		x	x																										Showroom only.
	36	x		x																										Showroom only.
	DT-3 (53)	x	x	x	x	x	x	x	x	x	x	x		x		x	x	x			x	x	x	x		x	x	x	x	
	40	x	x	x	x	x	x	x		x	x	x																		
	41	x	x	x	x	x	x	x																						
	37	x	x	x	x	x	x	x		x	x	x																		
	6	x	x	x	x	x	x	x							x	x	x	x	x											
	7	x	x	x	x	x	x	x							x	x	x	x	x											
	8	x	x	x	x	x	x	x							x	x	x	x	x											
	9	x	x	x	x	x	x	x							x	x	x	x	x											
	10	x	x	x	x	x	x	x							x	x	x	x												Outside garment center.
	11	x	x	x	x	x	x	x							x	x	x	x												Outside garment center.
Children's Wear	28	x	x	x	x	x	x	x		x	x	x				x	x	x												
	29	x	x	x	x	x	x	x		x	x	x		x																
	33	x	x	x	x	x	x	x		x				x							x	x	x	x						
	43	x	x	x					x												x	x	x	x						Showroom only.
	50	x	x	x	x	x	x	x		x	x	x				x	x	x				x								
	48	x	x	x	x	x	x	x	x		x			x		x	x	x												
	27		x	x	x										x	x	x	x												Outside garment center.

Question Outstanding to Correct Questionnaire	Interview Number	Avg. Warehouse Price	Building Area	No. of Employees	Shipped Goods					Piece Goods					Cut/Finished Goods					Trim/Notions					Shipping Supplies					Comments
					Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	Annual Volume	Distribution of Activity	Weekly No. of Shipments	Trucker Usage	Intra G.C. Distance	
Coats and Suits																														
	47	x	x	x																										Showroom only.
	75	x	x	x	x	x	x	x	x	x	x	x			x	x		x								x	x	x	x	
	76	x	x	x	x	x	x	x			x	x	x		x	x	x	x	x		x	x	x							
	77	x	x	x	x	x	x	x	x										x											
	78	x	x	x	x	x	x	x	x	x	x	x	x	x					x											
Suppliers																														
	55	x	x	x						x	x	x	x																	
	57		x	x						x	x	x	x						x											
	56		x	x						x	x	x	x																	
	58		x	x						x	x	x	x	x																
	60		x	x						x	x	x	x	x																
	62		x	x						x	x		x																	
	59	x	x	x							x	x	x																	
	61	x	x	x																										
	63			x						x	x																			
	67		x	x																						x	x			
	68		x	x																						x	x		x	
	71		x	x																										
	79																									x				
	74		x	x																	x									
	73		x	x																	x		x	x						
	72		x	x																x	x	x	x							
	70		x	x																	x	x	x	x						
	69		x	x																x	x	x	x	x						
	65		x	x																	x	x	x							
	64		x	x																x		x	x	x						

Notes on Particular Questionnaires

35 showrooms only; 19, 24, 39, 44, 46, 48, and 54 were "no shows;" 66 was an interview with an office supplies house.

("X" denotes available information.)

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EXHIBIT III

WHOLESALE VALUE OF PRODUCT

	Apparel Firms Interviewed							
	Sportswear		Dresses		Coats and Suits		Children's Wear[1]	
Wholesale Value	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent
$ 0 - 4.99	1	8%					1	17%
$ 5 - 9.99	7	54%	3	17%			3	50%
$10 -19.99	4	30%	6	33%	1	20%		
$20 -39.99	1	8%	6	33%	1	20%	2	33%
$40 -79.99			2	11%	1	20%		
$80+			1	6%	2	40%		
Total	13	100%	18	100%	5	100%	6	100%
Average Wholesale Value	$10.65		$25.55		$60.20		$14.60	

EXHIBIT IV
AVERAGE TIME FROM CUT TO SHIP TO CUSTOMER

	Apparel Firms Interviewed							
	Sportswear		Dresses		Coats and Suits		Children's Wear[1]	
Time In Weeks	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent
1 - 2 Weeks	5	36%	5	29%	2	40%	2	40%
2+ - 3 Weeks	4	29%	8	47%	3	60%	3	60%
3+ - 4 Weeks	4	29%	2	12%				
4+ Weeks	1	6%	2	12%				

(1) Includes children's coats.

EXHIBIT V

FUNCTIONS PERFORMED AT LOCATION(1)
APPAREL FIRMS INTERVIEWED

	Jobbers and Manufacturers								Contractors		Suppliers					
	Sportswear		Dresses		Coats & Suits		Children's Wear				Piece Goods		Trim & Notions		Shipping Supplies	
Functions	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.
Piece Goods																
- Receive	12	92%	14	82%	4	100%	5	100%	1	13%	9	100%				
- Warehouse	12	92%	14	82%	3	75%	5	100%			9	100%				
- Process	0	-	0	-	2	50%	0	-								
- Cut	11	85%	13	76%	4	100%	5	100%	1	13%						
- Ship	2	15%	1	6%	2	50%	1	20%			9	100%				
Trim & Notions																
- Receive	12	92%	12	71%	4	100%	5	100%	8	100%					7	100%
- Warehouse	3	23%	2	12%	3	75%	1	20%							7	100%
- Ship	9	69%	5	29%	2	50%	3	60%							7	100%
Cut Goods																
- Receive	0	-	0	-	0	-	0	-	8	100%						
- Sew	2	15%	3	18%	1	25%	2	40%								
- Ship	11	85%	10	59%	3	75%	3	60%								
Ship Sewn Goods	1	8%	0	-	0	-	0	-	8	100%						
Finished Goods																
- Receive	13	100%	15	88%	3	75%	3	60%								
- Warehouse	13	100%	17	100%	4	100%	5	100%								
- Ship	13	100%	17	100%	4	100%	5	100%								
Shipping Supplies																
- Receive	13	100%	15	88%	4	100%	5	100%	2	25%			4	100%		
- Warehouse	6	46%	5	29%	2	50%	1	20%					4	100%		
- Ship	2	15%	1	6%	1	25%	0	-					4	100%		
Pattern Making	13	100%	15	88%	4	100%	4	80%								
Sample Making	13	100%	15	88%	4	100%	5	100%								
Offices	11	85%	16	94%	4	100%	5	100%			8	89%			1	14%
Showroom	9	69%	15	88%	4	100%	4	80%			8	89%	2	50%		
Total Responses	13	100%	17	100%	4	100%	5	100%	8	100%	9	100%	4	100%	7	100%

(1) Excludes facilities with showrooms only.

EXHIBIT VI

EMPLOYMENT CHARACTERISTICS OF FIRMS INTERVIEWED

APPAREL FIRMS INTERVIEWED

	Jobbers and Manufacturers								Contractors		Suppliers					
	Sportswear		Dresses		Coats & Suits		Children's Wear				Piece Goods		Trim & Notions		Shipping Supplies	
Number of Employees	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.
0-19	5	36%		12%	2	40%	1	17%	0	-	6	67%	5	42%	3	100%
20-39	2	14%	8	47%	0	-	1	17%	3	38%	3	33%	7	58%	0	-
40-59	2	14%	4	23%	2	40%	3	49%	2	25%	0	-	0	-	0	-
60-79	1	7%	2	12%	0	-	1	17%	2	25%	0	-	0	-	0	-
80-99	1	7%	1	6%	0	-	0	-	0	-	0	-	0	-	0	-
100+	3	21%	0	-	1	20%	0	-	1	12%	0	-	0	-	0	-

EXHIBIT VII

ANNUAL SHIPMENT CHARACTERISTICS OF APPAREL FIRMS INTERVIEWED

	Jobbers and Manufacturers Interviewed								Contractors	
Annual Units Shipped	Sportswear Responses	%	Dresses Responses	%	Coats & Suits Responses	%	Children's Wear Responses	%	Responses	%
0-19,999			1	6%					2	28%
20,000-39,999			3	18%			1	20%	2	28%
40,000-79,999			3	18%	2	50%			2	28%
80,000-159,999	3	33%			2	50%	2	40%		
160,000-319,999	1	11%	4	24%						
320,000-639,999			3	18%			1	20%		
640,000+	5	56%	3	18%			1	20%	1	14%

EXHIBIT VIII

ANNUAL UNITS SHIPPED PER EMPLOYEE

Annual Units Shipped Per Employee	Apparel Firms Interviewed											
	Sportswear		Dresses				Coats & Suits		Children's Wear			
			Jobber & Mfr.		Contractor				Jobber & Mfg.		Contractor	
	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent
0- 999			3	19%	4	67%	2	50%	1	20%		
1,000- 1,999			1	6%	2	33%						
2,000- 3,999	1	11%	1	6%			2	50%	1	20%	1	100%
4,000- 7,999	1	11%	3	19%					1	20%		
8,000-15,999	1	11%	7	44%					1	20%		
16,000-24,999	4	45%							1	20%		
25,000+	2	22%	1	6%								
Total Responses	9	100%	16	100%	6	100%	4	100%	5	100%	1	100%
Average	20,600		9,300		775		1,800		8,110		3,750	

ANNUAL PIECE GOODS ROLLS
SHIPPED PER SUPPLIER EMPLOYEE

Piece Goods Rolls	Responses	Percent
0- 499	1	12%
500- 999	3	38%
1,000-1,999	2	25%
2,000+	2	25%
Total Responses	8	100%
Average	1,100 Rolls	

ANNUAL TRIM & NOTIONS
SHIPPED PER SUPPLIER EMPLOYEE

$ Volume	Responses	Percent
$37,500	1	33.3%
$43,200	1	33.3%
$62,500	1	33.3%
Total Responses	3	100%
Average	$47,700	

EXHIBIT IX

AREA CHARACTERISTICS OF APPAREL FIRMS INTERVIEWED

APPAREL FIRMS INTERVIEWED

Area of Firm (Square Feet)	Jobbers and Manufacturers								Contractors		Suppliers					
	Sportswear		Dresses		Coats & Suits		Children's Wear				Piece Goods		Trim and Notions		Shipping Supplies	
	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.	Resp.	Perc.
0 - 1,999	1	8%	0	-	0	-	0	-	3	43%	0	-	2	29%	1	33%
2,000 - 3,999	2	15%	1	6%	1	20%	1	17%	1	14%	0	-	3	42%	0	-
4,000 - 7,999	2	15%	3	19%	0	-	0	-	2	29%	3	37%	2	29%	1	33%
8,000 - 15,999	2	15%	8	50%	1	20%	3	50%	0	-	4	50%	0	-	1	33%
16,000 - 31,999	3	23%	2	13%	2	40%	2	33%	1	14%	1	13%	0	-	0	-
32,000+	3	23%	2	13%	1	20%	0	-	0	-	0	-	0	-	0	-

EXHIBIT X

AREA OF LOCATION PER EMPLOYEE[1]

APPAREL FIRMS INTERVIEWED

Area of Firm Per Employee (Square Feet)	Sportswear		Dresses				Coats and Suits		Children's Wear			
			Jobber and Manufacturer		Contractor				Jobber and Manufacturer		Contractor	
	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent
0 - 99			1	6%	5	83%						
100 - 199	1	8%			1	17%			2	33%	1	100%
200 - 299	2	15%	3	18%			1	20%	1	17%		
300 - 499	7	54%	7	40%			2	40%	2	33%		
500 - 749	1	8%	4	24%			1	20%	1	17%		
750 - 999	2	15%	1	6%			1	20%				
1,000+			1	6%								
Total Responses	13	100%	17	100%	6	100%	5	100%	6	100%	1	100%
Average	450		425		50		385		295		100	

SUPPLIER FIRMS INTERVIEWED

Area of Firm Per Employee (Square Feet)	Piece Goods		Trim and Notions		Shipping Suppliers	
	Responses	Percent	Responses	Percent	Responses	Percent
100 - 199			1	14%		
200 - 399	2	25%	4	57%		
400 - 599	3	25%	2	29%		
600 - 799					1	33%
800 - 999	1	13%			1	34%
1,000 - 1,499	1	12%				
1,500 - 2,000	2	25%			1	33%
Total Responses	8	100%	7	100%	3	100%
Average	880		310		1,040	

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(1) Excludes facilities with showrooms only. Includes salesmen when given. Salesmen will often pick the garments from warehouse stock for customer's orders thereby performing a direct labor function.

EXHIBIT XI

DESTINATION OF SHIPPED GOODS

APPAREL FIRMS INTERVIEWED

	Sportswear		Dresses		Coats and Suits		Children's Wear	
Destination	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent
Percent to Garment Center								
0 - 9	6	67%	11	79%	2	50%	4	80%
10 - 19	2	22%	2	14%	1	25%	0	-
20 - 29	1	11%	1	7%	1	25%	1	20%
Average	5%		4%		26%		6%	
Percent to Commercial Zone								
0 - 19	2	22%	5	36%	2	50%	2	40%
20 - 39	3	34%	4	29%	1	25%	0	-
40 - 59	2	22%	1	7%	0	-	2	40%
60 - 79	0	-	3	21%	1	25%	0	-
80 -100	2	22%	1	7%	0	-	1	20%
Average	44%		35%		33%		40%	
Percent Beyond Commercial Zone								
0 - 19	1	12%	1	7%	2	50%	1	20%
20 - 39	2	22%	3	21%	0	-	1	20%
40 - 59	2	22%	1	7%	0	-	0	-
60 - 79	2	22%	5	36%	1	25%	1	20%
80 -100	2	22%	4	29%	1	25%	2	40%
Average	51%		61%		41%		54%	

EXHIBIT XII

APPAREL FIRM'S[1] OF FREIGHT FIRM BY DESTINATION OF SHIPPED GOODS

Destination	Local		Freight Forwarder		Air Freight		Parcel Post		UPS	
	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent
Within Garment Center										
Percent										
0 - 19	25		29	100%	29	100%	29	100%	29	100%
20 - 39	0	-	0	-	0	-	0	-	0	-
40 - 59	1	3%	0	-	0	-	0	-	0	-
60 - 79	0	-	0	-	0	-	0	-	0	-
80 -100	3	11%	0	-	0	-	0	-	0	-
Average	12%		0%		0%		0%		0%	
Within Commercial Zone										
Percent										
0 - 19	6	23%	25	96%	26	100%	26	100%	10	39%
20 - 39	2	8%	0	-	0	-	0	-	5	19%
40 - 59	3	12%	1	4%	0	-	0	-	2	8%
60 - 79	4	15%	0	-	0	-	0	-	4	15%
80-100	11	42%	0	-	0	-	0	-	5	19%
Average	59%		2%		0%		1%		38%	
Beyond Commercial Zone										
Percent										
0 - 19	14	52%	24	89%	27	100%	27	100%	1	3%
20 - 39	3	11%	1	4%	0	-	0	-	4	15%
40 - 59	4	15%	2	7%	0	-	0	-	5	19%
60 - 79	4	15%	0	-	0	-	0	-	5	19%
80 -100	2	7%	0	-	0	-	0	-	12	44%
Average	29%		5%		2%		1%		63%	

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(1) Includes only jobbers and manufacturers.

EXHIBIT XIII

AVERAGE HOURS PER EMPLOYEE REQUIRED PER WEEK FOR MOVEMENT OF GOODS ON STREET

Apparel Firm Interviewed	Responses	Average Hours Per Week Per Employee
Ladies' Sportswear	6	.18 hours
Ladies' Dresses	15	.20 hours
Ladies' Coats and Suits	3	.66 hours
Children's Wear	5	.22 hours
Contractors	4	.40 hours
Piece Goods Supplier	9	8.95 hours
Trim and Notions Supplier	7	8.23 hours
Shipping Supplies Supplier	3	15.33 hours

EXHIBIT XIV

LOCATION OF CONTRACTOR

APPAREL FIRMS INTERVIEWED

Location	Sportswear Responses	Sportswear Percent	Dresses Responses	Dresses Percent	Coats and Suits Responses	Coats and Suits Percent	Children's Wear Responses	Children's Wear Percent
Percent Within Garment Center								
0 - 19	5	83%	5	83%	1	50%	3	100%
20 - 39	1	17%	0	-	1	50%	0	-
40 - 59	0	-	0	-	0	-	0	-
60 - 79	0	-	0	-	0	-	0	-
80 -100	0	-	1	17%	0	-	0	-
Average	6%		18%		17%		0%	
Percent Within Commercial Zone								
0 - 19	1	17%	2	33%	0	-	0	-
20 - 39	1	17%	0	-	0	-	0	-
40 - 59	0	-	0	-	0	-	1	33%
60 - 79	1	17%	0	-	1	50%	0	-
80 -100	3	49%	4	67%	1	50%	2	67%
Average	58%		66%		83%		83%	
Percent Beyond Commercial Zone								
0 - 19	3	50%	5	83%	2	100%	2	67%
20 - 39	1	17%	0	-	0	-	0	-
40 - 59	0	-	0	-	0	-	1	33%
60 - 79	0	-	0	-	0	-	0	-
80 -100	2	33%	1	17%	0	-	0	-
Average	36%		16%		0%		17%	

EXHIBIT XV

CONTRACTOR'S USE OF PUSHBOYS FOR PICKUP/DELIVERY

Apparel Firm Location	His Pushboys Responses	His Pushboys Percent	Other Than His Pushboys Responses	Other Than His Pushboys Percent
Within Garment Center Percent				
0 - 19	2	28%	5	72%
20 - 39	0	-	0	-
40 - 59	0	-	0	-
60 - 79	0	-	0	-
80 -100	5	72%	2	28%
Average		71%		29%
Within Commercial Zone Percent				
0 - 19	2	100%	0	-
20 - 39	0	-	0	-
40 - 59	0	-	0	-
60 - 79	0	-	0	-
80 -100	0	-	2	100%
Average		0%		100%
Beyond Commercial Zone Percent				
0 - 19	1	100%	0	-
20 - 39	0	-	0	-
30 - 59	0	-	0	-
60 - 79	0	-	0	-
80 -100	0	-	1	100%
Average		0%		100%

SUPPLIERS USE OF PUSHBOYS FOR SHIPMENTS

Destination				
Within Garment Center Percent				
0 - 19	0	-	17	94%
20 - 39	0	-	0	-
40 - 59	1	6%	1	6%
60 - 79	0	-	0	-
80 -100	17	94%	0	-
Average		97%		3%
Within Commercial Zone Percent				
0 - 19	5	31%	8	51%
20 - 39	0	-	2	12%
40 - 59	1	6%	1	6%
60 - 79	2	12%	0	-
80 -100	8	51%	5	31%
Average		61%		39%
Beyond Commercial Zone Percent				
0 - 19	3	43%	3	43%
20 - 39	0	-	0	-
40 - 59	1	14%	1	14%
60 - 79	0	-	0	-
80 -100	3	43%	3	43%
Average		47%		53%

EXHIBIT XVI

ORIGINATION OF PIECE GOODS

APPAREL FIRMS INTERVIEWED

Origination	Sportswear Responses	Sportswear Percent	Dresses Responses	Dresses Percent	Coats and Suits Responses	Coats and Suits Percent	Children's Wear Responses	Children's Wear Percent
Percent From Garment Center								
0 - 19	6	100%	4	50%	2	67%	4	80%
20 - 39	0	-	3	38%	1	33%	1	20%
40 - 59	0	-	1	12%	0	-	0	-
60 - 79	0	-	0	-	0	-	0	-
80 -100	0	-	0	-	0	-	0	-
Average	2%		17%		10%		8%	
Percent From Commercial Zone								
0 - 19	5	83%	3	38%	2	67%	5	100%
20 - 39	1	17%	4	50%	1	33%	0	-
40 - 59	0	-	0	-	0	-	0	-
60 - 79	0	-	1	12%	0	-	0	-
80 -100	0	-	0	-	0	-	0	-
Average	9%		23%		10%		4%	
Percent Beyond Commercial Zone								
0 - 19	0	-	0	-	0	-	0	-
20 - 39	0	-	2	25%	0	-	0	-
40 - 59	0	-	2	25%	0	-	0	-
60 - 79	1	17%	2	25%	1	33%	0	-
80 -100	5	83%	2	25%	2	67%	5	100%
Average	89%		60%		80%		88%	

EXHIBIT XVII

FREIGHT FIRMS UTILIZED FOR SHIPMENT OF PIECE GOODS FROM PIECE GOODS SUPPLIER

Destination	Common Carrier		Local		Private		Freight Forward		UPS		Air	
	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent
Within Commercial Zone												
Percent												
0 - 19	4	67%	2	33%	6	100%	6	100%	6	100%	6	100%
20 - 39	0	-	0	-	0	-	0	-	0	-	0	-
40 - 59	0	-	0	-	0	-	0	-	0	-	0	-
60 - 79	0	-	0	-	0	-	0	-	0	-	0	-
80 -100	2	33%	4	67%	0	-	0	-	0	-	0	-
Average	33%		65%		0%		1%		1%		0%	
Beyond Commercial Zone												
Percent												
0 - 19	3	60%	3	60%	5	100%	5	100%	4	80%	5	100%
20 - 39	0	-	0	-	0	-	0	-	0	-	0	-
40 - 59	0	-	0	-	0	-	0	-	0	-	0	-
60 - 79	0	-	0	-	0	-	0	-	0	-	0	-
80 -100	2	40%	2	40%	0	-	0	-	1	20%	0	-
Average	35%		37%		0%		5%		19%		4%	

EXHIBIT XVIII

SUPPLIER FIRM ORIGINATION AND DESTINATION OF PRODUCT

	Originations						Destinations					
	Piece Goods		Trim and Notions		Shipping Supplies		Piece Goods		Trim and Notions		Shipping Supplies	
	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent	Responses	Percent
Percent Garment Center												
0 - 19	7	100%	1	17%	2	100%	0	-	1	17%	0	-
20 - 39	0	-	0	-	0	-	0	-	0	-	0	-
40 - 59	0	-	2	33%	0	-	1	13%	0	-	0	-
60 - 79	0	-	2	33%	0	-	5	62%	0	-	0	-
80 -100	0	-	1	17%	0	-	2	25%	5	83%	3	100%
Average	0%		51%		0%		68%		77%		87%	
Percent Commercial Zone												
0 - 19	4	57%	1	17%	0	-	3	37%	5	83%	1	67%
20 - 39	0	-	4	66%	0	-	3	37%	0	-	1	33%
40 - 59	1	14%	0	-	0	-	2	26%	1	17%	0	-
60 - 79	0	-	1	17%	0	-	0	-	0	-	0	-
80 -100	2	29%	0	-	2	100%	0	-	0	-	0	-
Average	30%		33%		90%		24%		15%		13%	
Percent Beyond Commercial Zone												
0 - 19	0	-	4	66%	1	50%	6	75%	5	83%	3	100%
20 - 39	2	29%	1	17%	1	50%	2	25%	0	-	0	-
40 - 59	1	14%	1	17%	0	-	0	-	1	17%	0	-
60 - 79	0	-	0	-	0	-	0	-	0	-	0	-
80 -100	4	57%	0	-	0	-	0	-	0	-	0	-
Average	70%		16%		10%		8%		8%		0%	

EXHIBIT XIX

LOCATION OF TRIM, NOTION AND SHIPPING SUPPLIES SUPPLIER FOR APPAREL FIRMS(1)

	Responses	Percent
Within Garment Center Only	7	54%
Within Commercial Zone Only	0	-
Garment Center & Commercial Zone	6	46%
Beyond Commercial Zone	0	-

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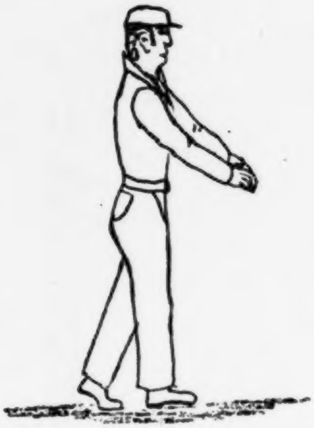
(1) Includes dresses, sportswear, coats and suits and children's wear.

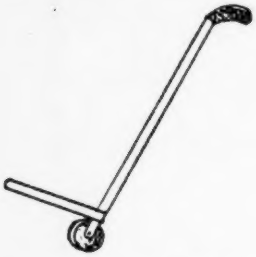
EXHIBIT XX

MATERIAL HANDLING EQUIPMENT

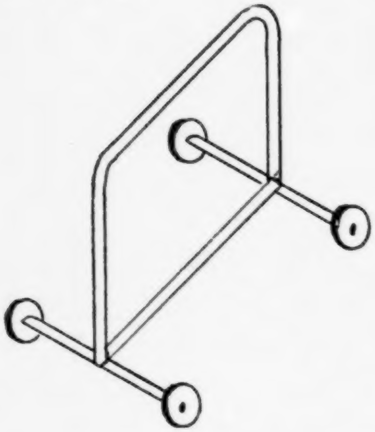
PERSON



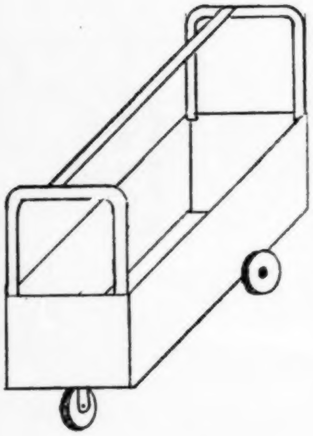
2 WHEELED HAND TRUCK



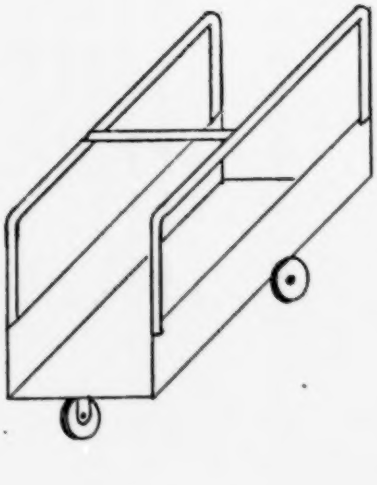
PIPE RACK



BOX RACK



PIECE GOODS TRUCK



PLATFORM TRUCK

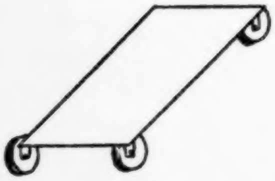


EXHIBIT XXI
CLASSIFICATION BY SIC CODES
1973 DATA(1)

Blocks	Subtotal 2200's		221x		222x		223x		224x		225x	
	Firms	Empls.	Firms	Empls.	Firms	Empls.	Firms	Empls.	Firms	Empls.	Firms	Empls.
W 35th between 7th & 8th	18	140	1	5	3	9	3	31	1	25	10	70
W 36th between 6th & 7th	23	411	0	0	4	263	1	3	0	0	18	145
W 37th between 7th & 8th	2	9	0	0	0	0	0	0	0	0	2	9
Garment Center Core W 34th to W 40th between 6th to 8th	196	4,622	11	2,270	20	537	25	442	10	142	130	1,231
Garment Center	305	6,037	19	2,335	34	776	41	624	26	248	185	2,054

(1) 1973 Dun & Bradstreet Data

2200's - Textile mill products

221x - Broad woven fabric mills, cotton

222x - Broad woven fabric mills, man-made fiber and silk

223x - Broad woven fabric mills, wool (including dyeing and finishing)

224x - Narrow fabrics and other smallwares mills: cotton, wool, silk, and man-made fiber

225x - Women's full length and knee length hosiery; hosiery, except women's full length and knee length hosiery; knit outerwear mills; knit underwear mills; knit fabric mills; circular knit fabric mills; warp knit fabric mills; knitting mills, not elsewhere classified

CLASSIFICATION BY SIC CODES (Page 2)

1973 DATA(1)

Blocks	Subtotal 2300's Firms	Subtotal 2300's Empls.	231x 232x Firms	231x 232x Empls.	Subtotal 2330's Firms	Subtotal 2330's Empls.	2331 Firms	2331 Empls.	2335 Firms	2335 Empls.	2337 Firms	2337 Empls.	2339 Firms	2339 Empls.
W 35th between 7th & 8th	161	2,918	0	0	149	2,702	4	74	61	840	24	434	60	1,354
W 36th between 6th & 7th	187	2,667	3	43	157	1,985	29	622	72	725	10	181	44	457
W 37th between 7th & 8th	257	4,513	2	500	181	2,832	1	0	44	1,254	108	1,385	17	193
Garment Center Core W 34th to W 40th between 6th to 8th	1,993	36,141	22	608	1,649	29,894	115	1,882	857	17,577	342	5,630	335	4,805
Garment Center	2,602	47,302	58	844	1,868	34,561	128	1,980	980	20,890	384	6,334	376	5,357

(1) 1973 Dun & Bradstreet Data

2300's - Apparel and other finished products made from fabrics and other similar materials

231x 232x - Men's, youth's, and boys' suits, coats and overcoats; men's, youth's, and boys' shirts (except work shirts), and nightwear; men's, youth's, and boys' underwear; men's youth's, and boys' neckwear; men's, youth's, and boys' separate trousers; men's, youth's, and boys' work clothing; men's, youth's, and boys' clothing, not elsewhere classified

2331 - Women's, misses', and juniors' blouses, waists, and shirts

2335 - Women's, misses', and juniors' dresses

2337 - Women's, misses', and juniors' suits, skirts, and coats

2339 - Women's, misses', and juniors' outerwear, not elsewhere classified

CLASSIFICATION BY SIC CODES (Page 3)

1973 DATA(1)

Blocks	234x Firms	234x Empls.	235x Firms	235x Empls.	236x Firms	236x Empls.	237x Firms	237x Empls.	238x w/o 2385 Firms	238x w/o 2385 Empls.	2385 Firms	2385 Empls.	239x Firms	239x Empls.
W 35th between 7th & 8th	0	0	1	10	2	31	0	0	6	144	0	0	3	31
W 36th between 6th & 7th	1	6	0	0	21	520	0	0	4	89	0	0	3	24
W 37th between 7th & 8th	2	10	0	0	28	486	1	9	20	430	21	234	2	12
Garment Center Core W 34th to W 40th between 7th to 8th	8	80	10	172	110	2,191	8	85	69	1,523	61	644	56	944
Garment Center	21	248	74	1,178	141	2,797	15	207	150	3,627	74	803	201	3,037

(1) 1973 Dun & Bradstreet Data

234x - Women's, misses', children's, and infants' underwear and nightwear; corsets and allied garments

235x - Millinery; hats and caps, except millinery

236x - Girls', children's and infants' dresses, blouses, waists and shirts; girls', children's and infants' coats and suits; girls', children's and infants' outerwear, not elsewhere classified

237x - Fur goods

238x w/o 2385 - Dress and work gloves, except knit and all leather; robes and dressing gowns; leather and sheep lined clothing; apparel belts; apparel and accessories, not elsewhere classified

2385 - Raincoats and other waterproof outer garments

239x - Curtains and draperies; housefurnishings, except curtains and draperies; textile bags; canvas and related products; pleating, decorative and novelty stitching, and tucking for the trade; automotive trimmings, apparel findings, and related products; Schiffli machine embroideries; fabricated textile products, not elsewhere classified

CLASSIFICATION BY SIC CODES (Page 4)

1973 DATA[1]

Blocks	Subtotal 4200's		4212		4213		Subtotal 5100's		5133		5134		5136		5137	
	Firms	Empls.	Firms	Empls.	Firms	Empls.	Firms	Empls.	Firms	Empls.	Firms	Empls.	Firms	Empls.	Firms	Empls.
W 35th between 7th & 8th	10	146	9	146	1	0	111	688	48	321	36	144	1	1	26	222
W 36th between 6th & 7th	6	87	3	87	1	0	120	1,190	63	825	14	207	0	0	43	158
W 37th between 7th & 8th	13	157	10	113	1	11	117	775	36	272	19	187	0	0	62	316
Garment Center Core W 34th to W 40th between 6th to 8th	59	908	44	835	4	11	1,227	10,137	547	4,971	76	1,627	33	198	571	3,341
Garment Center	105	1,794	73	1,325	11	191	1,937	16,701	911	9,282	248	2,588	69	544	709	4,287

(1) 1973 Dun & Bradstreet Data

4200's - Motor freight transportation and warehousing
4212 - Local trucking without storage
4213 - Trucking, except local
5100's - Wholesale trade - nondurable goods
5133 - Piece goods (woven fabrics)
5134 - Notions and other dry goods
5136 - Men's and boys' clothing and furnishings
5137 - Women's, children's and infants' clothing and accessories

III LAND USE AND ECONOMIC DATA

III.1 INTRODUCTION

Goods movement difficulties in the Garment Center are a result, in part, of the area's physical characteristics and land use. The area is filled with tall buildings ranging in size from 12 to 20 stories. The buildings are occupied mainly by small apparel firms, as discussed in Chapter I. The vast majority of the buildings were built prior to World War II and, therefore, have inadequate elevators and lack off-street loading facilities. As a consequence, there are a lot of inflows and outflows within a small, compact area.

This chapter will discuss the broad issues of the area's land use, including such topics as zoning, building analysis, assessed value, employment, rents and vacancy rates, and sample block segments, and their relationships and inter-relationships with goods movement.

Most of the City's apparel showrooms are on Seventh Avenue and Broadway, which has developed over the years as a convenient and natural marketplace for apparel buyers. Buyers are within short walking distances of the various manufacturers. Similar firms cluster in the same building and similar buildings are generally near each other. Thus, for example, everyone in the trade knows 550 Seventh Avenue as a couture dress building and 463 Seventh as a popular price building. Popular price dresses cluster around Seventh Avenue and West 35th Street, couture at Seventh and 39th, sportswear around Broadway and 39th, coats and suits at Seventh and 37th Street, as shown in Figure III-1. The Garment Center Study Area is defined as the 60 blocks between Fifth and Tenth Avenues from West 30th Street to West 42nd Street.(1) It consists of 330 acres of land, 99 acres of which are streets. There are 1,025 buildings and 65 vacant lots in these boundaries, comprising 78 million square feet of floor area. The vacant lots add up to almost one million square feet of space, or 22 empty acres.

The Garment Center Core is defined as the area from Broadway to Eighth Avenue between West 34th Street and West 40th Street as shown in Figure III-2. It consists of 45 acres of land, 13 acres of which are streets. In the dense Core, there are 170 buildings with 20 million square feet of space, or 25 percent of the Study Area's total square feet of floor area.

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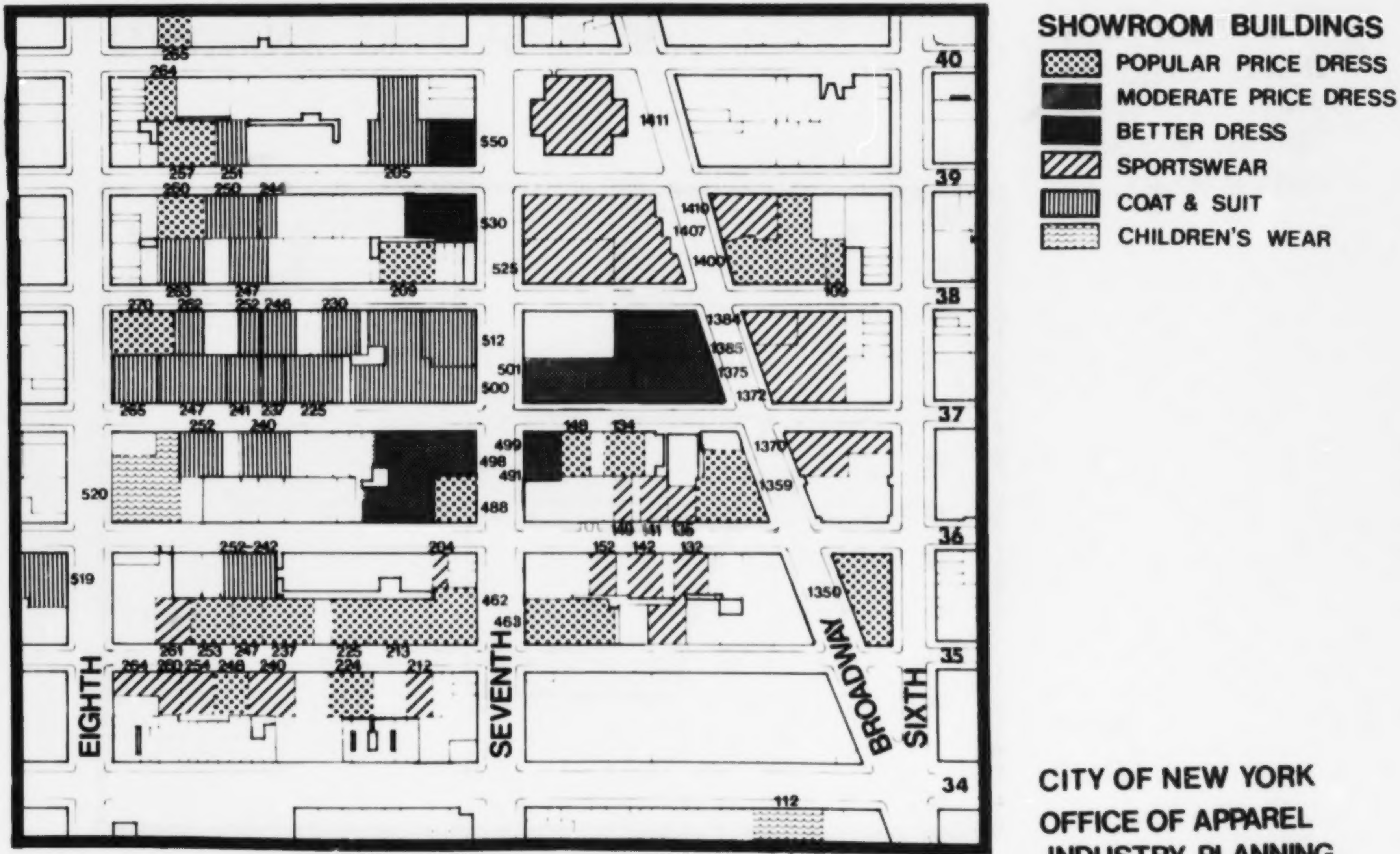
1. These boundaries differ from those used for the collection of transportation data which used an area bounded on the south by West 34th Street. The additional 20 blocks are included in the land use study since many manufacturers are located on these side streets.


SHOWROOM BUILDINGS
▨ POPULAR PRICE DRESS
■ MODERATE PRICE DRESS
■ BETTER DRESS
▨ SPORTSWEAR
▥ COAT & SUIT
▨ CHILDREN'S WEAR
EIGHTH
SEVENTH
BROADWAY
SIXTH
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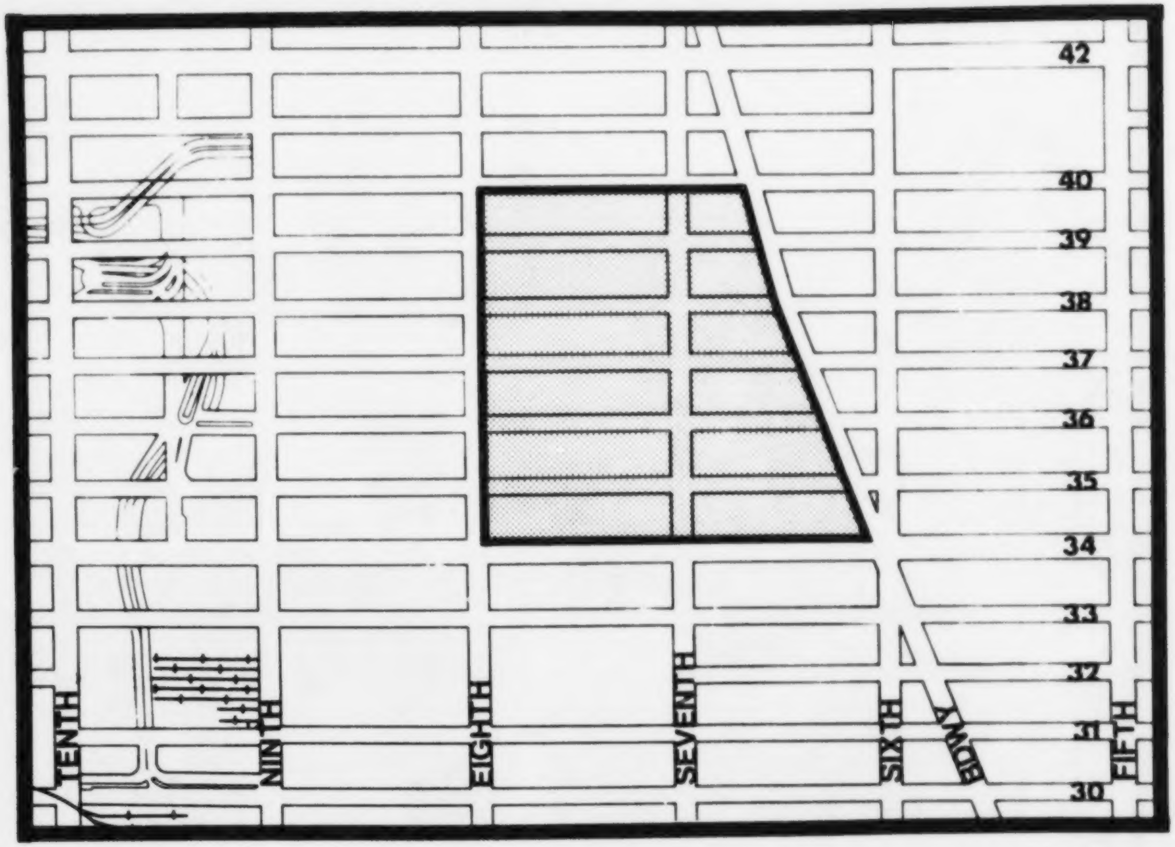
GARMENT CENTER STUDY

Figure III-1

CITY OF NEW YORK
OFFICE OF APPAREL
INDUSTRY PLANNING
AND DEVELOPMENT
MARCH 1974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SIXTH
BDWY
FIFTH

GARMENT
CENTER
CORE

CITY OF NEW YORK
OFFICE OF APPAREL
INDUSTRY PLANNING
AND DEVELOPMENT
MARCH 1974

GARMENT CENTER STUDY

Figure III-2

III.2 BUILDING ANALYSIS

Slightly less than half the buildings and floor area in the Garment Center Study are lofts used for manufacturing and contracting.

The ratio changes in the dense Garment Center Core, where three quarters of the buildings and the total floor area are lofts. Although the Core contains only 16 percent of the total lot area of the study area, it contains 25 percent of the loft buildings and 40 percent of the total floor area.

Table III-1 lists the types of buildings in the Study Area and in the Core by total square footage. Table III-2 compares buildings and floor space in the Core as a percent of the buildings and floor space in the Study Area.

Loft buildings in New York City as a whole are described as substantial and nonsubstantial. Substantial loft buildings are eight or more stories high and have a street frontage of fifty feet or more. Substantial lofts comprise ninety percent of the total square feet of the floor area in loft buildings in the Study Area. The greater the proportion of substantial loft buildings, the greater the intensity of land use. This leads to high pedestrian utilization and goods movement activity on the streets.

Table III-1 : BUILDING TYPES

BUILDING TYPES	GARMENT CENTER STUDY AREA				GARMENT CENTER CORE			
	No. of Bldgs	% of Total	Sq. Ft.	% of Total	No. of Bldgs	% of Total	Sq. Ft.	% of Total
Loft Buildings	527	48.6 %	35,957,194	46.1 %	130	76.5 %	14,872,901	75.3 %
Office Buildings	108	10.0	23,759,640	30.4	12	7.1	2,600,630	13.2
Department Stores and Commercial Taxpayers	83	7.6	4,845,779	6.2	13	7.6	1,558,385	7.9
Public and Private Institutions, Utilities & Government Buildings	43	4.0	3,537,525	4.5	6	3.5	347,097	1.8
Hotels and Residential Buildings	207	19.1	7,172,666	9.2	7	4.1	275,765	1.3
Misc. (Garages, Theatres, Etc.)	51	4.7	1,838,001	2.4	2	1.2	104,668	.5
Vacant Lots and Unclassified Buildings	66	6.0	967,225	1.2	--	--	---	--
TOTAL	1,085	100.0 %	78,078,030	100.0 %	170	100.0 %	19,759,446	100.0 %

SOURCE: CAIPD - IN-HOUSE DATA

Table III-2 : BUILDING TYPES: STUDY AREA COMPARED TO CORE

BUILDING TYPES	NUMBER OF BUILDINGS			TOTAL SQUARE FEET		
	STUDY AREA	CORE	CORE AS % OF STUDY AREA	STUDY AREA	CORE	CORE AS % OF STUDY AREA
Loft Building	527	130	24.6 %	35,957,194	14,872,901	41.4 %
Office Buildings	108	12	11.1	23,759,640	2,600,630	10.9
Department Stores & Commercial Taxpayers	83	13	15.7	4,845,779	1,558,385	32.2
Public & Private Institutions, Utilities & Gov't Buildings	43	6	14.0	3,537,525	347,097	9.8
Hotels and Residential Buildings	207	7	3.4	7,172,666	275,765	3.8
Misc. (Garages, Theaters Etc.)	51	2	3.9	1,838,001	104,668	5.7
Vacant Lots and Unclassified Buildings	66	--	0.0	967,225	---	---
TOTAL	1,085	170	15.7 %	78,078,030	19,759,446	25.2 %

SOURCE: OAIPD - IN-HOUSE DATA

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The typical substantial loft building is 12 to 20 stories and has a street frontage of 75 to 125 feet. Half of all substantial loft buildings in the Study Area are in the Core and contain the majority of jobs and showrooms. All predate World War II, but have modernized ground floor lobbies, resembling new office building entrances. Generally, the showrooms are combined with design, sample making, pattern making and grading, cutting, storage, and shipping facilities.

The nonsubstantial loft buildings contain a relatively small percentage of jobs. They represent 10 percent of total floor space in loft buildings. Because of their size, usually less than six stories high, and street frontages, ranging from 25 to 50 feet, they are too small to be used efficiently as showrooms or for manufacturing.

Office buildings comprise 30 percent of floor area in the Study Area, but only 11 percent of the total office floor area is in the Core. Most of the office buildings are between Fifth Avenue and the east side of Broadway and in the area south of 34th Street between Fifth and Eighth Avenues.

The substantial office buildings contain the headquarters of large nationwide corporations. As an example, 1411 Broadway is used by apparel manufacturers for showrooms only. The nonsubstantial office buildings, representing only 5 percent of total office floor area, are used by printing firms, photography studios, architectural offices, and other service companies.

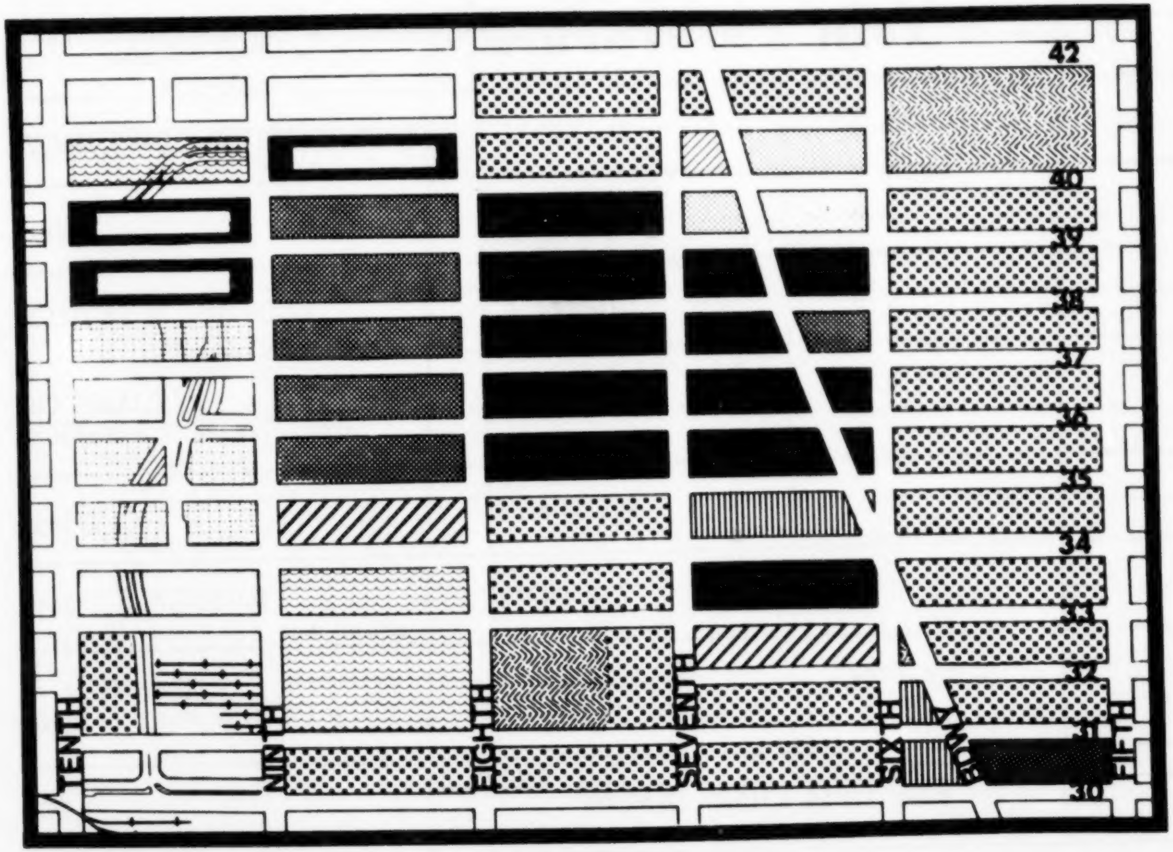
Loft and office buildings together comprise 58 percent of all buildings and 76 percent of total floor area in the Study Area. They also comprise 84 percent of the buildings and 88 percent of the total floor area in the Core. The remaining buildings are public and private institutions such as churches and social organizations; utility and government buildings such as electric power stations, firehouses and post offices; garages, and hotels, and residential buildings.

III.3 LAND USE

Apparel manufacturers and showrooms are the major use of the buildings in the Study area. They comprise 35 percent of the total floor area in the Study Area and 80 percent of the total floor area in the Core. Apparel manufacturers and showrooms are concentrated between Avenue of Americas, known as Sixth Avenue, and Ninth Avenue from West 40th Streets as shown in Figure III-3.

The second most important use of buildings in the Study Area is offices. They comprise 30 percent of the total floor area in the Study Area and 8 percent of the total floor area in the Core. Many loft buildings have been converted to office use. That is why, although half the total floor area in the Study Area is in loft buildings (Table III-1), only one-third is actually used for manufacturing and showrooms. Offices predominate between Fifth and Sixth Avenues and in the areas south of West 35th Street and north of West 40th Street between Sixth and Eighth Avenues.

Non-apparel manufacturing, wholesaling, retailing, services, residences, hotels, and other uses are located outside the Core. To the east and south of the Core are retail department store complexes generating substantial pedestrian activity. This includes the lower Fifth Avenue and Herald Square shopping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SIXTH
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FIFTH

PREDOMINANT LAND USE

- ░ TEXTILE SHOWROOMS
- ▯ APPAREL SHOWROOMS
- ▩ APPAREL MANUFACTURE
- ■ APPAREL MANUFACTURE WITH SHOWROOMS
- □ MISC. MANUFACTURING
- ▦ OFFICE
- ▨ MISC. SHOWROOMS
- ▥ RETAIL TRADE
- ▨ HOTEL
- ▩ PARKS AND RECREATION
- ░ RESIDENTIAL
- ▣ TRANSPORTATION
- ▤ GOVERNMENT & INSTITUTIONS
- □ VACANT LAND & BUILDINGS

CITY OF NEW YORK
OFFICE OF APPAREL
INDUSTRY PLANNING
AND DEVELOPMENT
MARCH 1974

GARMENT CENTER STUDY

Figure III-3

Table III-3 : LAND USE

USE	GARMENT CENTER STUDY AREA		GARMENT CENTER CORE	
	SQUARE FEET	PERCENT	SQUARE FEET	PERCENT
Apparel Manufacture & Showrooms	28,046,993 sq. ft.	35.9 %	16,567,083 sq. ft.	78.7 %
Misc. Manufacture	3,250,279	4.2	137,543	.7
OFFICE	23,401,555	29.9	1,733,038	8.9
WHOLESALE & RETAIL TRADE AND SERVICES	7,066,137	9.0	1,706,409	8.6
RESIDENTIAL AND HOTEL	7,277,010	9.4	328,117	1.7
OTHER	7,652,780	9.7	170,538	.8
VACANT LAND AND BUILDINGS	1,498,047	1.9	115,728	.6
TOTAL	78,192,741 sq. ft.	100.0 %	19,758,448 sq. ft.	100.0 %

SOURCE: OAIPD - IN-HOUSE DATA

Table III-4 : LAND USE : STUDY AREA COMPARED TO CORE

	STUDY AREA	CORE	CORE AS % OF STUDY AREA
Apparel Manufacture and Showrooms	28,046,993 sq. ft.	16,567,083 sq.ft.	59.1 %
Misc. Manufacture	3,250,279	137,543	11.6
Office	23,401,555	1,733,038	7.4
Wholesale and Retail Trade and Services	7,066,137	1,706,409	24.1
Residential and Hotel	7,277,010	328,117	4.5
Other	7,652,780	170,538	2.2
Vacant Land and Buildings	1,498,047	115,728	7.7
TOTAL	78,192,741 sq.ft.	19,758,448 sq.ft.	25.3 %

SOURCE: CAIPD - IN-HOUSE DATA.

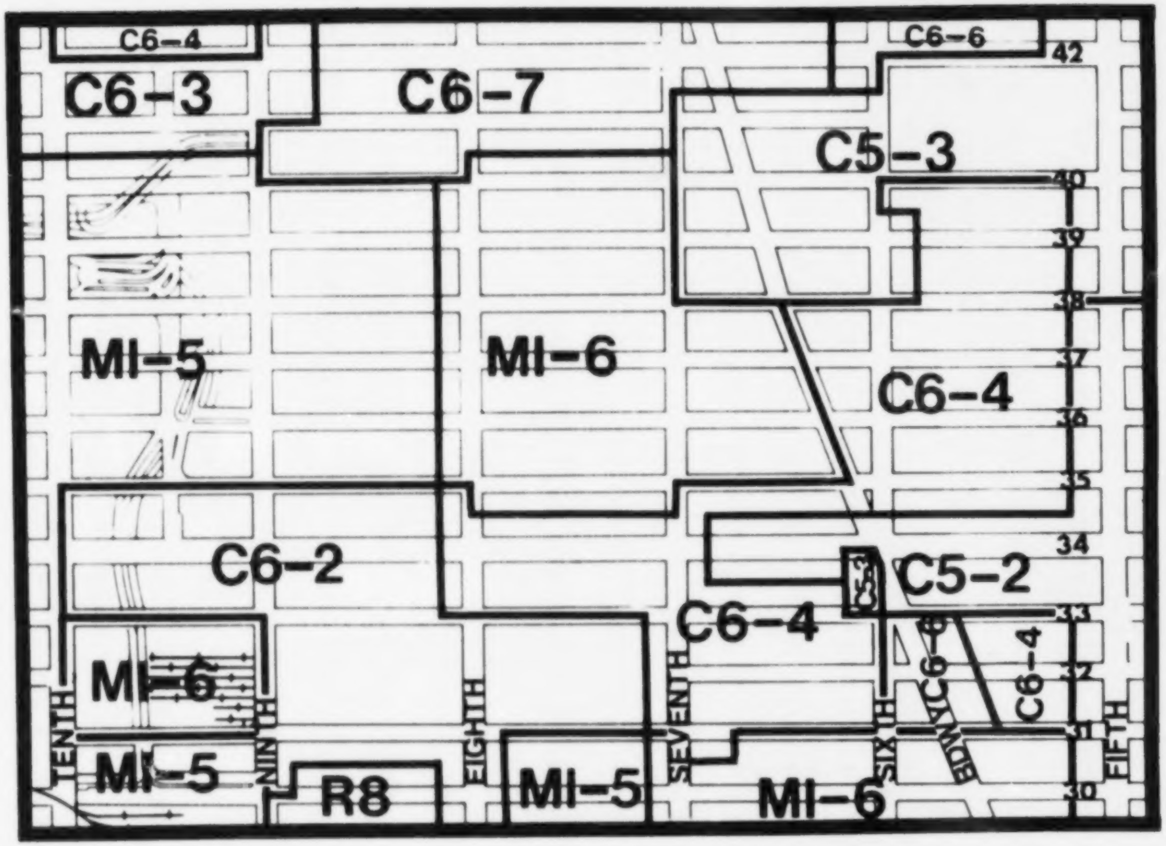
districts. South of the Core is Penn Station and west of the Core is The Port Authority Bus Terminal, both generating great volumes of commuter and tourist traffic. North of the Core is Times Square and south of the Core is Madison Square, making the area a magnet for tourism and recreation. Thus, the districts surrounding the Core contribute to the great congestion evident everywhere in the Study Area.

III.4 ZONING

The Study Area is zoned predominantly for high density light manufacturing and commercial uses, as shown in Figure III-4. The zoning, which was created after the area was already built up, is intended to protect the existing manufacturing buildings, rather than to encourage new development. The zoning district regulations for new construction reflect the existing size. Thus, in the Core,which has the biggest buildings, the permitted density (expressed by a formula called Floor Area Ratio or FAR) is high. West of the Core, where existing buildings are smaller, the zoning regulations permit only small buildings. East of the Core and to the north and south, the zoning regulations permit higher density commercial and residential buildings because little manufacturing occurs there.

Broadway to Tenth Avenue from West 35th to 40th Streets is zoned M1-6 and M1-5. The M1 designation permits light manufacturing, such as apparel and related trades, printing, and publishing.

The zoning is M1-6 from Broadway to 100 feet west of Eighth Avenue between West 35th and 40th Streets. The 6 indicates that the maximum allowed building bulk is a FAR of 10, that is, a building whose total floor area is no more


C6–4
C6–3
C6–7
C6–6
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C5–3
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C6–2
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C5–2
C5-3
C6–4
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C6–4
C6–6
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MI–6
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TENTH
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EIGHTH
SEVENTH
SIXTH
BDWY
FIFTH

ZONING

R RESIDENTIAL

C COMMERCIAL

M MANUFACTURING

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GARMENT CENTER STUDY Figure III-4

than ten times the size of the lot on which it is built. Many of the buildings in this District actually exceed the permitted FAR for new buildings. This is in the dense Core of the Garment Center Study Area.

The zoning is M1-5 from 100 feet west of the Eighth Avenue to Tenth Avenue between West 35th and 40th Streets. The 5 permits a FAR of 5. This means that a new building's floor area cannot exceed five times the area of the lot on which it stands. Generally, an M1-5 building is six stories high. The segment of Ninth Avenue within this District consists almost entirely of Old Law Tenements with groundfloor commercial uses as Ma and Pa stories. The remaining buildings are mostly one and two story nonresidential structures that do not fill the zoning envelope because they are less than FAR 5. They do not use thepermitted bulk and contain many automotive repair shop and small-scale trucking terminals.

West 34th Street from Eighth to Tenth Avenues is a C6-2 District. The C6 indicates that commercial and residential uses are permitted, but manufacturing is not. The 2 indicates a FAR equivalent of 5 and most of the existing structures actually fill the zoning envelope. Retail stores, office buildings, institutional structures, and multiple dwelling buildings are located in this District.

South of the United States Post Office is an R8 District, permitting only residential buildings, which is an extension of the Chelsea community. West of the Post Office is a two block M1-6 District, covering the railroad yards over which the recently completed Midtown Mart building is situated.

West 34th Street from Seventh to Eighth Avenues and the area from Fifth to Seventh Avenues between West 31st Street is zoned C6-4 and C6-6. The 4 permits a FAR of 10 and the 6 permits a FAR of 15. Another C6-4 District is mapped from Broadway to Fifth Avenue between West 35th Street and 40th Streets. These Districts contain mostly high-density office buildings with some substantial loft buildings. The existing buildings in these Districts generally fill their zoning envelope.

West 43rd Street from Fifth to Seventh Avenues is zoned C5-2 and the area from Sixth to Seventh Avenues between West 38th and 42nd Streets is zoned C5-3. The C5 designation permits office buildings, department stores, retail, and wholesale activities. C5 is a restricted central business district designation, as opposed to C6, which permits a wider range of commercial activities. The 2 permits a FAR of 10 and the 3 permits a FAR of 15. In both Districts, existing buildings fill their zoning envelopes.

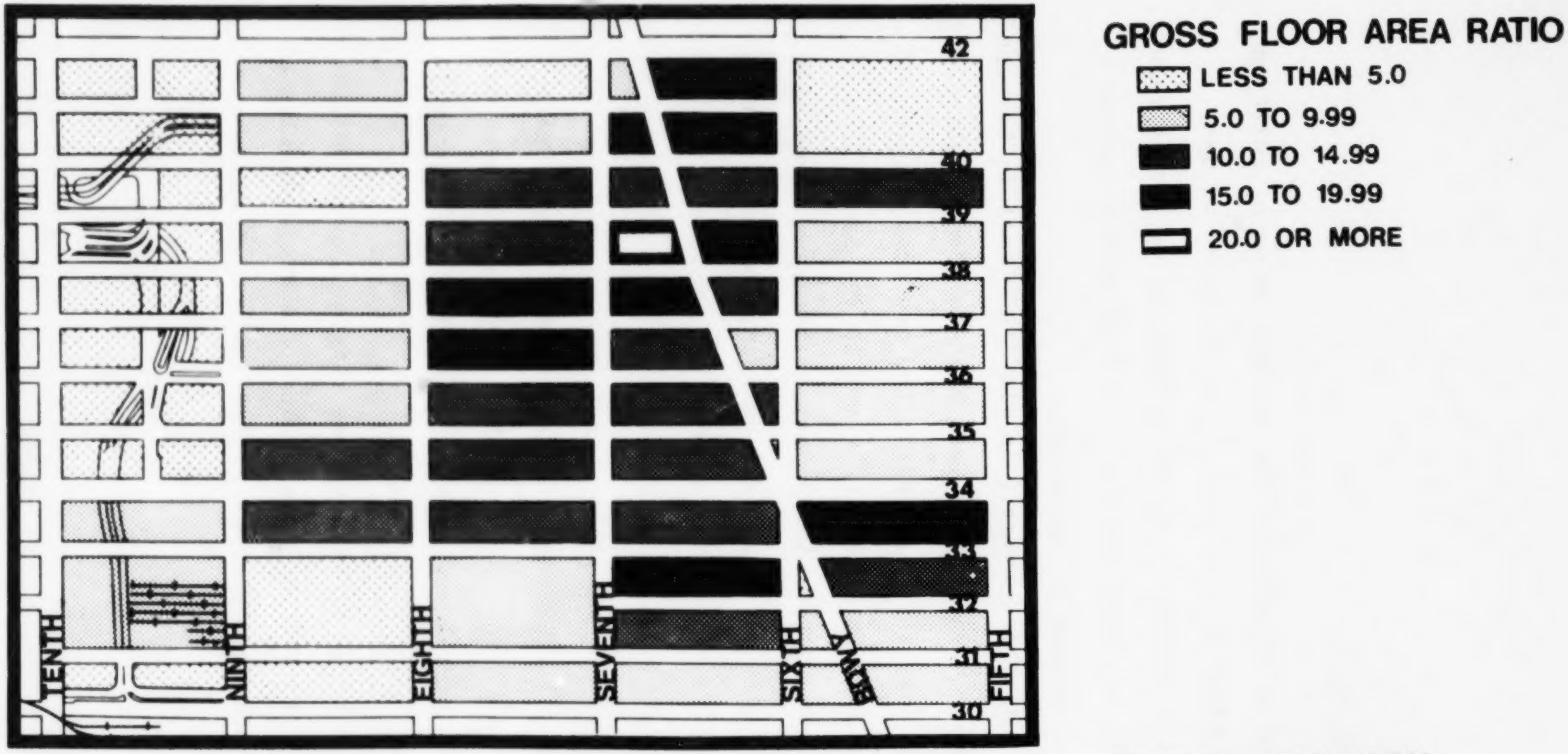
The area around West 42nd Street from Sixth to Tenth Avenues is zoned C6-3 and C6-7. This area is the southern portion of Times Square and has offices, amusement, and retail activities. The 3 permits a FAR of 10 and the 7 permits a FAR of 15. Few of the buildings along the West 42nd Street corridor fill their zoning envelopes.

III.5 GROSS FLOOR AREA RATIO

Figure III-5 illustrates the existing average Floor Area Ratio (FAR) of each block in the Study Area. To determine the gross FAR, the total floor area in every building on a block was added up, and then divided by the total lot area. The highest gross FAR, i.e., the block with the greatest density, is found in the M1-6 and C6-4 zoning Districts. High FAR means high density. For manufacturing areas, this implies heavy vehicle flow and goods movement on the streets. If the site is used for offices, there will be great amounts of pedestrian traffic during the morning, midday, and evening peak hours.

Some individual buildings have FAR of 20+, but only one block, West 38th to West 39th Street between Broadway and Seventh Avenue, has a FAR greater than 20. The buildings in this block are the highest density manufacturing and showroom buildings in the Study Area.

The Core exceeds FAR 10 on each block. The buildings are older. Very few contain off-street loading facilities now required by the zoning regulations in all new manufacturing buildings. Thus, two factors, dense development and a lack of off-street loading facilities, make the Garment Center the most congested goods handling area in the City.


GROSS FLOOR AREA RATIO
▨ LESS THAN 5.0
▨ 5.0 TO 9.99
■ 10.0 TO 14.99
■ 15.0 TO 19.99
☐ 20.0 OR MORE
42
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SIXTH
BDWY
FIFTH

GARMENT CENTER STUDY Figure III-5

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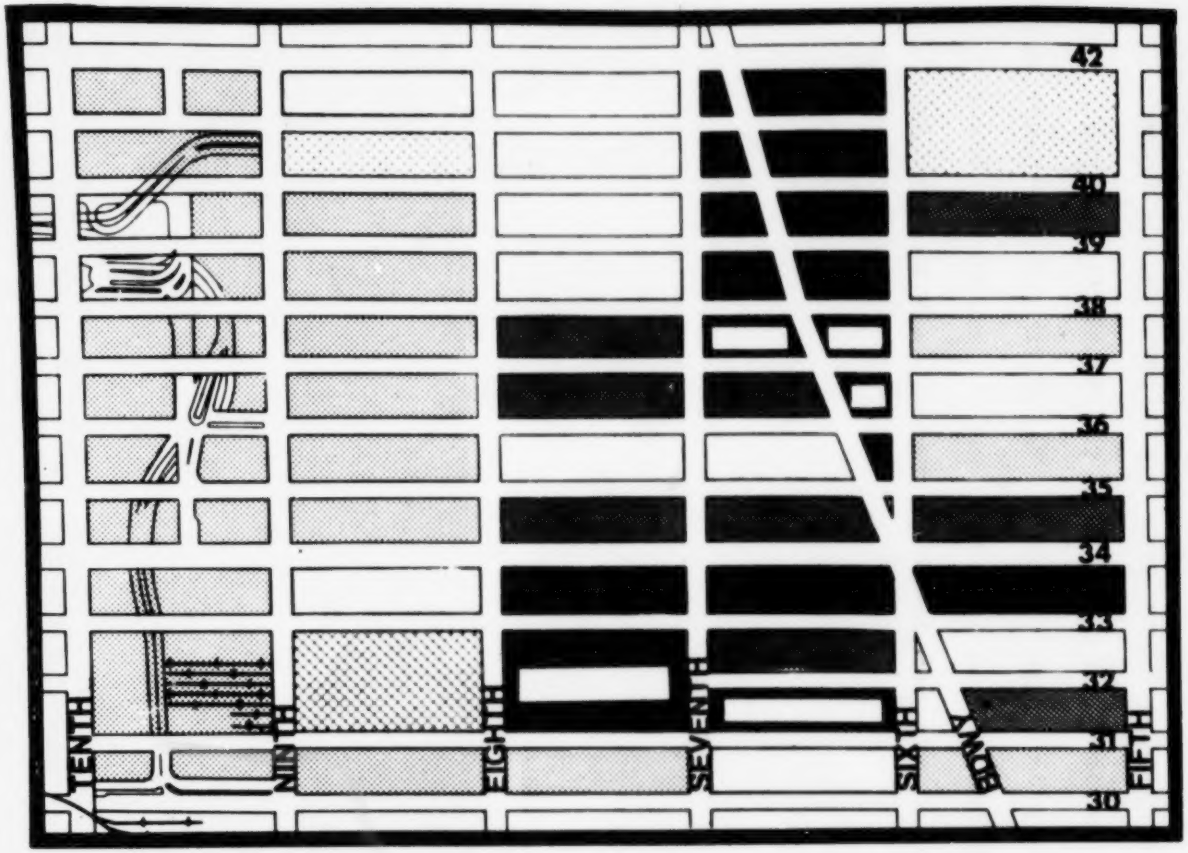
III. 6 ASSESSED VALUE

Figure III-6 illustrates the average value of built-up land for each block in the Study Area. Assessed values, computed for tax purposes, are an indication of market values. Multiplying the assessed value by 1.7 will predict market value for this section of Manhattan.

The most valuable property in the Study Area is between Sixth and Seventh Avenues from West 38th to 42nd Streets. It is used mostly for offices. Most of the new construction of office buildings in the past ten years in the Study Area has occurred here. Values for individual buildings average $250 per square foot of lot area. Some buildings average as high as $500 per square foot and are among the most valuable property in midtown Manhattan. Values also exceed $250 per square feet on the south side of West 34th Street between Fifth to Eighth Avenues. Along this corridor are located the Empire State Building at Fifth Avenue; prime retail frontage between Sixth and Seventh Avenues, and One Penn Plaza, a new office building between Seventh and Eighth Avenues.

Moderately high property values ranging from $100-250 per square foot is located in the Core. The great density of these pre-1929 buildings accounts for their high value.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SIXTH
BDWY
FIFTH
ASSESSED VALUE
PER SQUARE FOOT
EXEMPT OR REUC
0 TO 99.99
100 TO 149.99
150 TO 199.99
200 TO 249.99
250 OR MORE

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INDUSTRY PLANNING
AND DEVELOPMENT
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GARMENT CENTER STUDY Figure III-6

West of Eighth Avenue, where density is lowest, the value drops to less than $100 per square foot, with some properties as low as $5 per square foot.

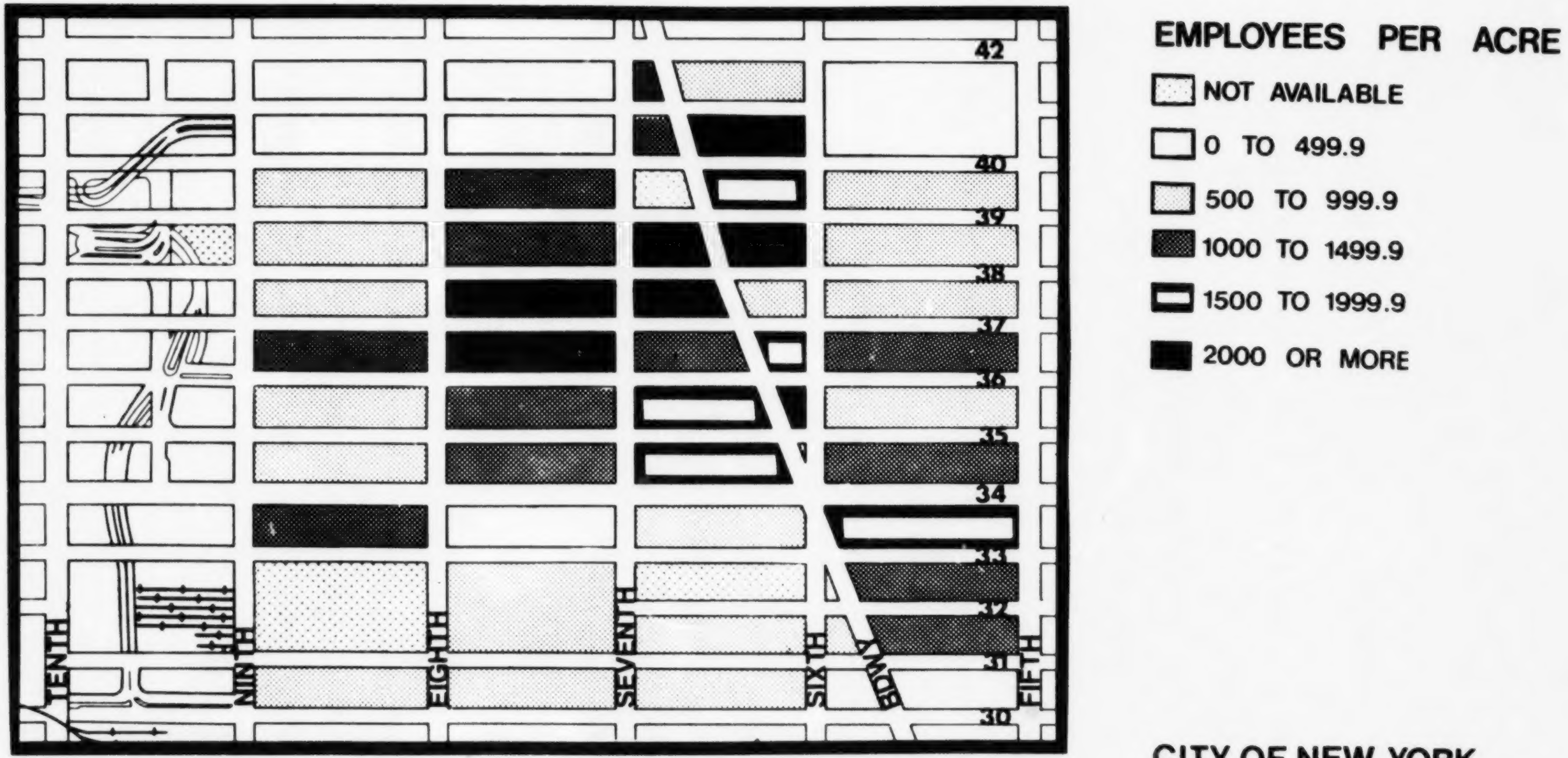
High assessed values mean high rents. The more valuable the property, the higher the taxes and operating costs. This means that only those apparel firms dealing on high profit margins and using little floor area can locate in the Core. The number of showrooms, which occupy the least floor area per employee, is greater in the Core. Manufacturing and contracting, which operate on low profit margins, tend to locate in lower value areas of the Core and south of it, as well as outside the Study Area.

III.7 EMPLOYMENT

Most of the apparel jobs in the Study Area are in the Core. The Core constitutes 16% of the Study Area and 34% of the jobs. Figure III-7 shows job density block by block in the Study Area. The greatest density is in the Core, with concentration of more than 2,000 employees per acre on seven blocks. Job density decreases with distance from the Core. West of Ninth Avenue and north of West 40th Street, job density drops below 500 per acre. This great job density is unmatched in the City, where average job density is about 100 per acre.

Table III-5 gives the number of firms and employees in the Study Area and the Core. Table III-8 gives job density in the Core as a percent of total jobs in the Study Area. The Core contains 43% of total jobs, but it accounts for 57% of the apparel jobs. Not only is the Core more dense, it is also more densely apparel.

Figure III-8 shows the apparel jobs concentration as a percent of total employment for each block. Jobwise, the Core is 75% or more devoted to apparel manufacturing. In three areas--from Broadway to Fifth, from Eighth to Ninth, and from Fifth to Sixth south of 34th Street--50 to 75% of the jobs are apparel.


EMPLOYEES PER ACRE
NOT AVAILABLE
0 TO 499.9
500 TO 999.9
1000 TO 1499.9
1500 TO 1999.9
2000 OR MORE
42
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GARMENT CENTER STUDY

Figure III-7

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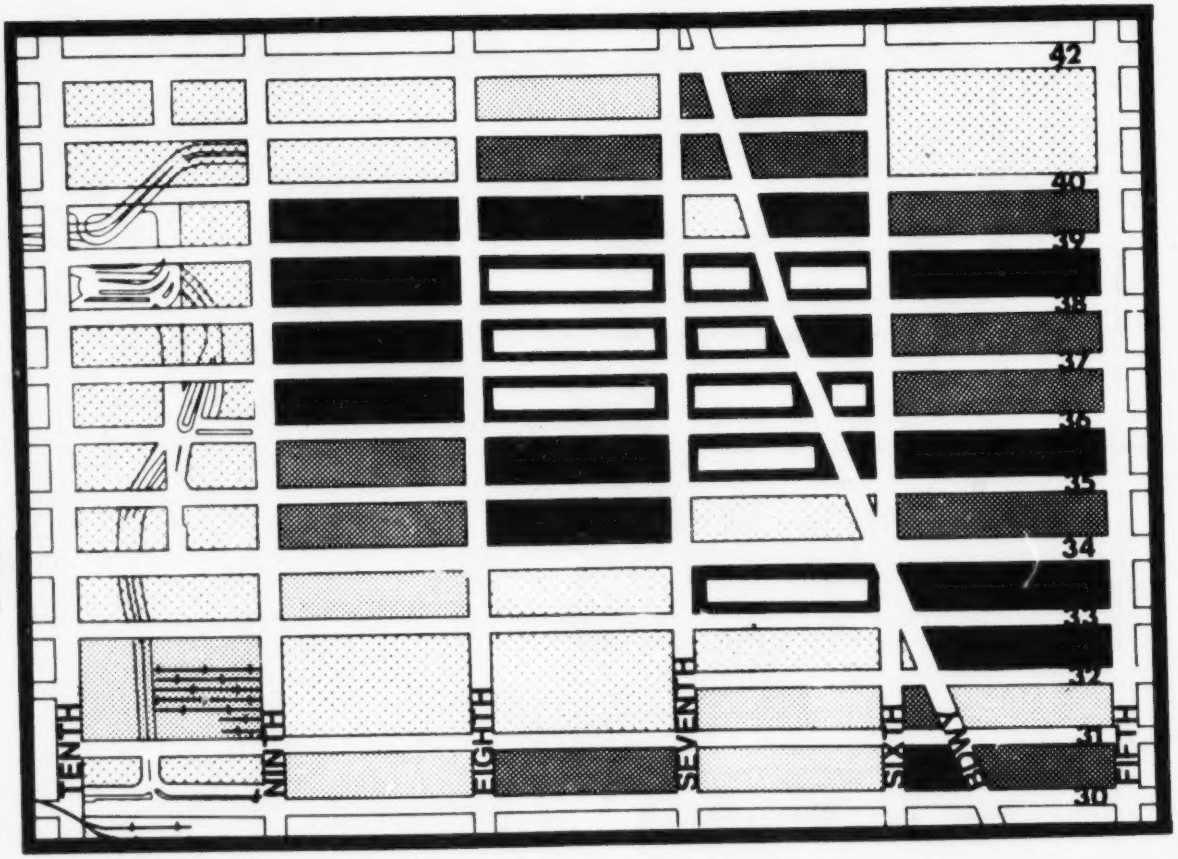
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SIXTH
BWAY
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PERCENT APPAREL EMPLOYEES

- ☐ NONE OR NOT AVAILABLE
- ░ 1.0 TO 24.9
- ▒ 25.0 TO 49.9
- ■ 50.0 TO 74.9
- ▭ 75.0 OR MORE

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GARMENT CENTER STUDY

Figure III-8

Table III-5 : EMPLOYMENT

	GARMENT CENTER STUDY AREA				GARMENT CENTER CORE			
	Firms		Employees		Firms		Employees	
	#	%	#	%	#	%	#	%
APPAREL	3,605	35.0 %	62,812	37.4 %	1,839	54.3 %	35,855	62.4 %
APPAREL-RELATED	2,587	25.1	24,422	14.5	859	25.4	7,872	13.6
OTHER	4,096	39.9	80,899	48.1	687	20.3	13,776	24.0
TOTAL	10,288	100.0 %	168,133	100.0 %	3385	100.0 %	57,503	100.0 %

SOURCE: DEPARTMENT OF CITY PLANNING AND OAIPD - IN-HOUSE DATA

Table III-6: EMPLOYMENT : STUDY AREA COMPARED TO CORE

	GARMENT CENTER STUDY AREA		GARMENT CENTER CORE		CORE AS % OF STUDY AREA	
	Firms	Employees	Firms	Employees	Firms	Employees
APPAREL	3,605	62,812	1,839	35,855	51.0 %	57.1 %
APPAREL-RELATED	2,587	24,422	859	7,872	33.2	32.2
OTHER	4,096	80,899	687	13,776	16.8	17.0
TOTAL	10,288	168,133	3385	57,503	32.9 %	34.2 %

Reproduced from best available copy.

SOURCE: DEPARTMENT OF CITY PLANNING AND OAIPD - IN-HOUSE DATA

Table III-7: BUILDINGS SURVEYED, BY FLOOR AREA RATIO

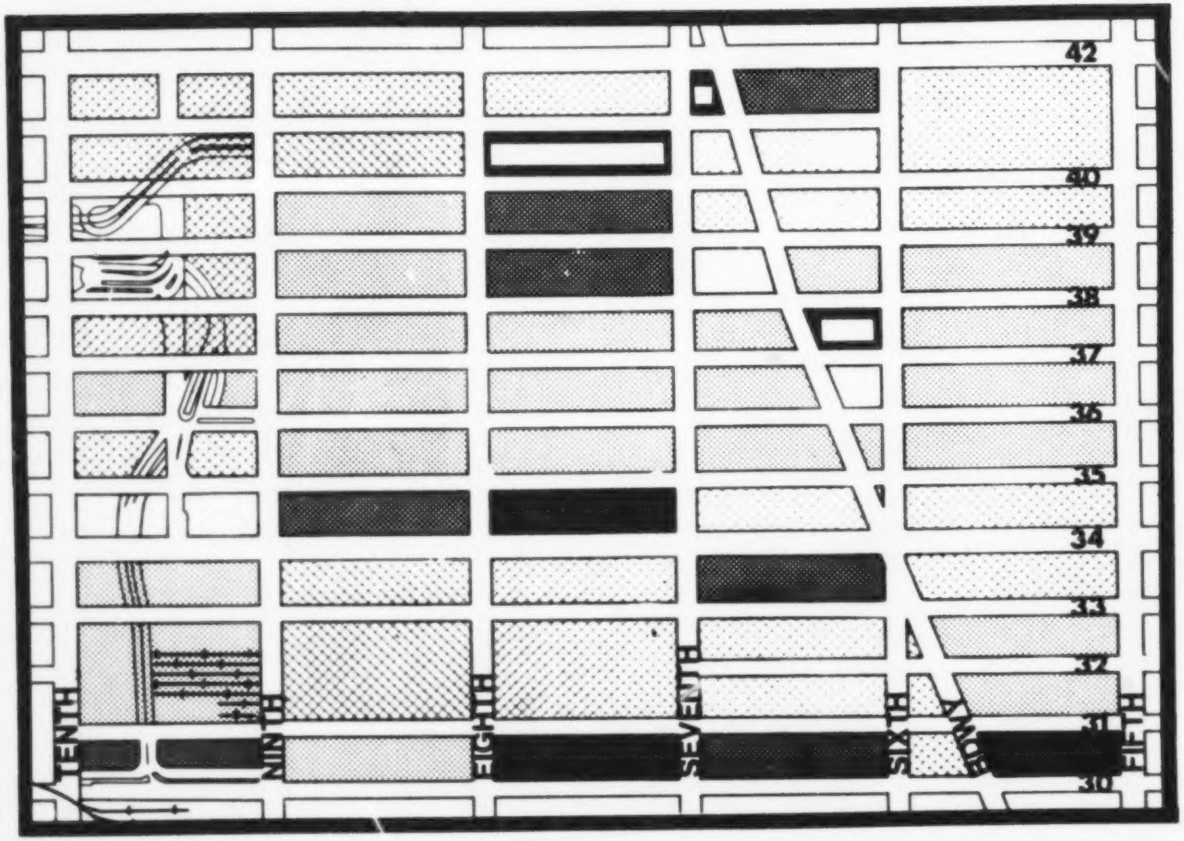
FLOOR AREA RATIO	NUMBER OF BUILDINGS	PERCENT
Less than 10	1	2.3 %
10 to 14.9	27	62.8
15 to 19.9	7	16.3
20 or more	8	18.6
	43	100.0 %

Table III-8: BUILDINGS SURVEYED, BY VACANCY RATES

VACANCY RATES	NUMBER OF BUILDINGS	PERCENT
None	13	30.2 %
1 - 4 %	11	25.6
5 - 9%	6	14.0
10 - 19%	7	16.2
20% or more	6	14.0
	43	100.0 %

Table III-9: VACANCY RATES BY LOCATION

	TOTAL FLOOR AREA	VACANT FLOOR AREA	VACANCY RATE
Broadway and Seventh Avenue (9)	4,054,497 Sq. Ft.	35,310 Sq. Ft.	0.8%
Sidestreets and Eighth Ave. (34)	4,106,987	335,605	8.2
All Buildings (43)	8,161,481 Sq. Ft.	370,915 Sq. Ft.	4.5%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NINTH
EIGHTH
SEVENTH
SIXTH
BDWY
FIFTH

SQUARE FEET OF MANUFACTURING SPACE PER MANUFACTURING EMPLOYEE

- ☐ 0 TO 249.9
- ░ 250 TO 349.9
- ▓ 350 TO 449.9
- ■ 450 TO 549.9
- ▭ 550 OR MORE
- ▒ NOT APPLICABLE

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GARMENT CENTER STUDY

Figure III-9

Apparel manufacturing is the second most efficient user of manufacturing space in New York City. It has 250 square feet of manufacturing space per employee; the City-wide all-industry average is 415 square feet per employee.

III.8 RENTS AND VACANCY RATES

To determine rental and vacancy rates in the Study Area, a random sample of loft and showroom buildings was selected. Forty-three buildings between Fifth and Ninth Avenues from West 34th to West 40th Streets were surveyed. Table III-7 shows the distribution of the buildings by F.A.R., the best indicator of building type. The majority of the buildings surveyed have an F.A.R. between 10 and 14.9 and all but two are typical loft buildings. Individual building street frontages range from 50-200 feet, heights vary from 12-40 stories, and total floor areas range from 45,000-725,000 square feet.

Vacancy rates vary from a low of zero to a high of 40%. Table III-8 shows the distribution of buildings by vacancy rates. The average vacancy rate for all buildings in the City is about 5%. Fifty-five percent of the buildings surveyed have vacancy rates below 5%. Thirty percent of the buildings appear to be suffering with vacancy rates from 4-19%. Fourteen percent of the buildings are hurting with vacancy rates above 20%.

No correlation was found between vacancy rates and building height, floor area per floor, total floor area, FAR, etc. The only factor affecting vacancy rates seems to be the location of buildings. There is less vacant space in avenue buildings than in sidestreet buildings. Table III-9 shows vacant floor area in two categories: (1) the major market buildings on Broadway and Seventh Avenue; and (2) the secondary market buildings on sidestreets and Eighth Avenue. The major buildings have a vacancy rate under 1 percent, while the secondary market buildings have a substantially higher vacancy rate of 8.2 percent. However, the Study Area average is 4.5 percent, below the Citywide average.

Current trends in the real estate market clarify these statistics. Years ago, the Garment Center in its peak had virtually the same building stock it has today. It was full. Now there are fewer companies. When avenue space becomes available, manufacturers from sidestreets move in because their buyers are impressed with an avenue address. The vacated sidestreet loft stays vacant because there are fewer companies. Thus, two factors, i.e. moveouts and movement within the Study Area, explain why sidestreets are suffering while avenue buildings are almost fully occupied.

Rents in the surveyed buildings range from $2-$10 per square foot. Table III-10 shows the distribution of buildings by rentals. Manhattan lofts rent for $1-$4 per square foot, depending on the location and condition of the building. The

Table III-10 : BUILDINGS SURVEYED, BY RENTAL

RENTAL	DISTRIBUTION NUMBER OF BUILDINGS	PERCENT
$2.00 per sq. ft.	8	18.6 %
2.25	5	11.6
2.50	13	30.2
3.00	6	14.0
More than $3.00	11	25.6
	43	100.0 %

Table III-11 : RENTALS BY LOCATION

	TOTAL FLOOR AREA	RENTAL
Broadway and Seventh Avenue (9)	4,054,497 Sq. Ft.	$7.12/Sq. Ft.
Sidestreets and Eighth Avenue (34)	4,106,987	2.47
All Buildings (43)	8,161,487 Sq. Ft.	$4.78/Sq. Ft.

Table III-12 : RENTAL AND VACNCY RATES BY LOCATION

	RENTAL	VACANCY
Fifth to Sixth Avenue (14)	$ 2.66	6.4%
Broadway (2)	10.00	0.0
Seventh Avenue (7)	5.21	1.4
Broadway to Seventh Avenue (3)	2.42	3.2
Seventh Ave. to Eighth Ave. (9)	2.43	8.4
Eighth to Ninth Avenue (8)	2.29	10.3

lowest rent in renovated buildings in the Study Area is $2.00 per square foot; the highest is $6.00 per square foot. The only two non-loft buildings surveyed are strictly showroom buildings, with rents of $10.00 per square foot. This is comparable to East Side office building rents.

Rents are determined by location, as shown in Table III- 11. While the average rent for all buildings in the survey is $4.78 per square foot, the average rent for Broadway and Seventh Avenue buildings is $7.12 per square foot. The secondary market buildings average is somewhat lower, $2.47 per square foot.

Table III-12 shows another interesting phenomenon in Study Area rents and vacancy rates. It illustrates that rents are highest and vacancies are lowest on Broadway and Seventh Avenue, the most desirable locations for showrooms. Rents decrease and vacancies increase with distance from Broadway and Seventh Avenue.

III.9 SAMPLE BLOCK SEGMENTS

Task 1D: Transportation Data of the Garment Center Urban Goods Movement Study enumerates detailed measurements of travel conflicts and delays in four sample block segments:

--West 35th Street between 7th and 8th Avenues

--West 36th Street between Broadway and 7th Avenue

--West 37th Street between 7th and 8th Avenues

--Seventh Avenue between West 37th and West 39th Streets.

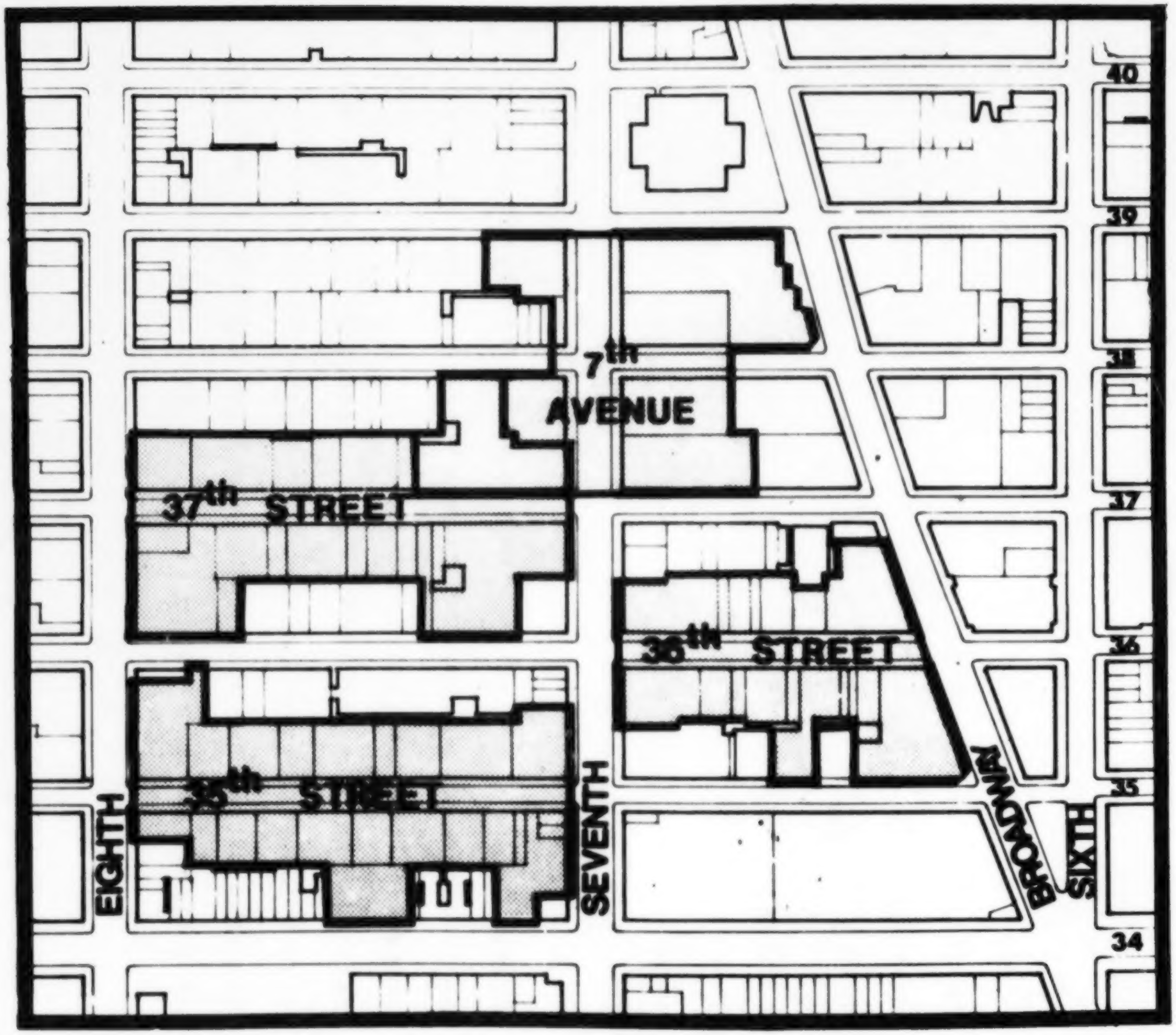
The following land use and economic data was collected for these four block segments to supplement the traffic study.

III.9.1 Land Use

The segments were outlined as to include all important sectors of the industry. West 35th Street is exclusively popular price dresses. West 36th Street consists entirely of popular price sportswear establishments. The coat and suit market is on West 37th Street. The Seventh Avenue segment, with 500 Seventh Avenue overlapping with the West 37th Street segment, has a mixture of coat and suit, moderate price and couture dresses, and better price sportswear.

The predominant use of land in each segment is apparel manufacturing and showrooms, as shown in Figure III-11.

Only four of the twenty-one buildings on West 35th Street are not lofts as shown in Table III-13. On West 36th Street,


40
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37
36
35
34
7th AVENUE
37th STREET
36th STREET
35th STREET
EIGHTH
SEVENTH
BROADWAY
SIXTH

SAMPLE
BLOCK
SEGMENTS

GARMENT CENTER STUDY

Figure III-16

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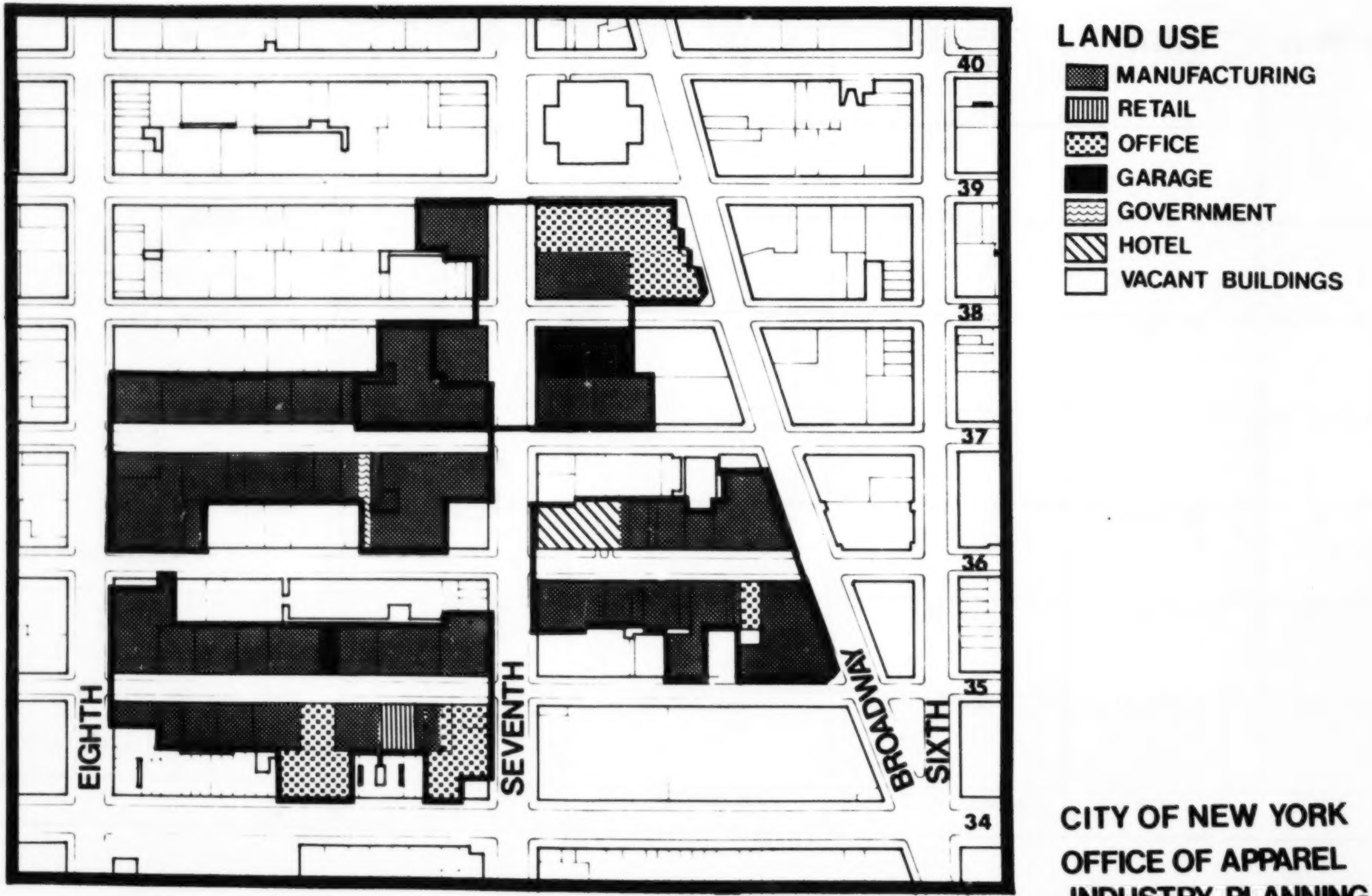
LAND USE
▩ MANUFACTURING
▥ RETAIL
▨ OFFICE
■ GARAGE
▤ GOVERNMENT
▧ HOTEL
□ VACANT BUILDINGS
40
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EIGHTH
SEVENTH
BROADWAY
SIXTH

GARMENT CENTER STUDY Figure III-11

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Table III-13 : BUILDING TYPES, SAMPLE BLOCK SEGMENTS

	WEST 35th STREET	WEST 36th STREET	WEST 37th STREET	SEVENTH AVE.	TOTAL
Substantial Loft Buildings					
Number	15	8	11	5	
Total Square Feet	2,141,108	1,368,902	3,299,386	2,414,271	49
Non-Substantial Loft Buildings					
Number	2	5	4	1	
Total Square Feet	11,124	93,585	191,921	19,800	12
Substantial Office Bldgs.					
Number	2	1		1	
Total Square Feet	799,190	25,319		1,725,720	4
Hotels					
Number		1			
Total Square Feet		228,015			1
Garages					
Number				1	1
Total Square Feet				59,400	
Government Buildings					
Number			1		1
Total Square Feet			7,068		
Commercial Taxpayers					
Number	2				2
Total Square Feet	18,807				
Grand Total					
Number	21	15	16	8	70
Total Square Feet	2,970,230	1,715,821	3,498,375	4,219,191	12,403,61

thirteen of the fifteen buildings are used for lofts and showrooms; fourteen of the fifteen buildings on West 37th Street are lofts and showrooms. The Seventh Avenue segment has seven buildings. Six are lofts, one is an office/showroom; all are apparel.

III. 9.2 Floor Area Ratio

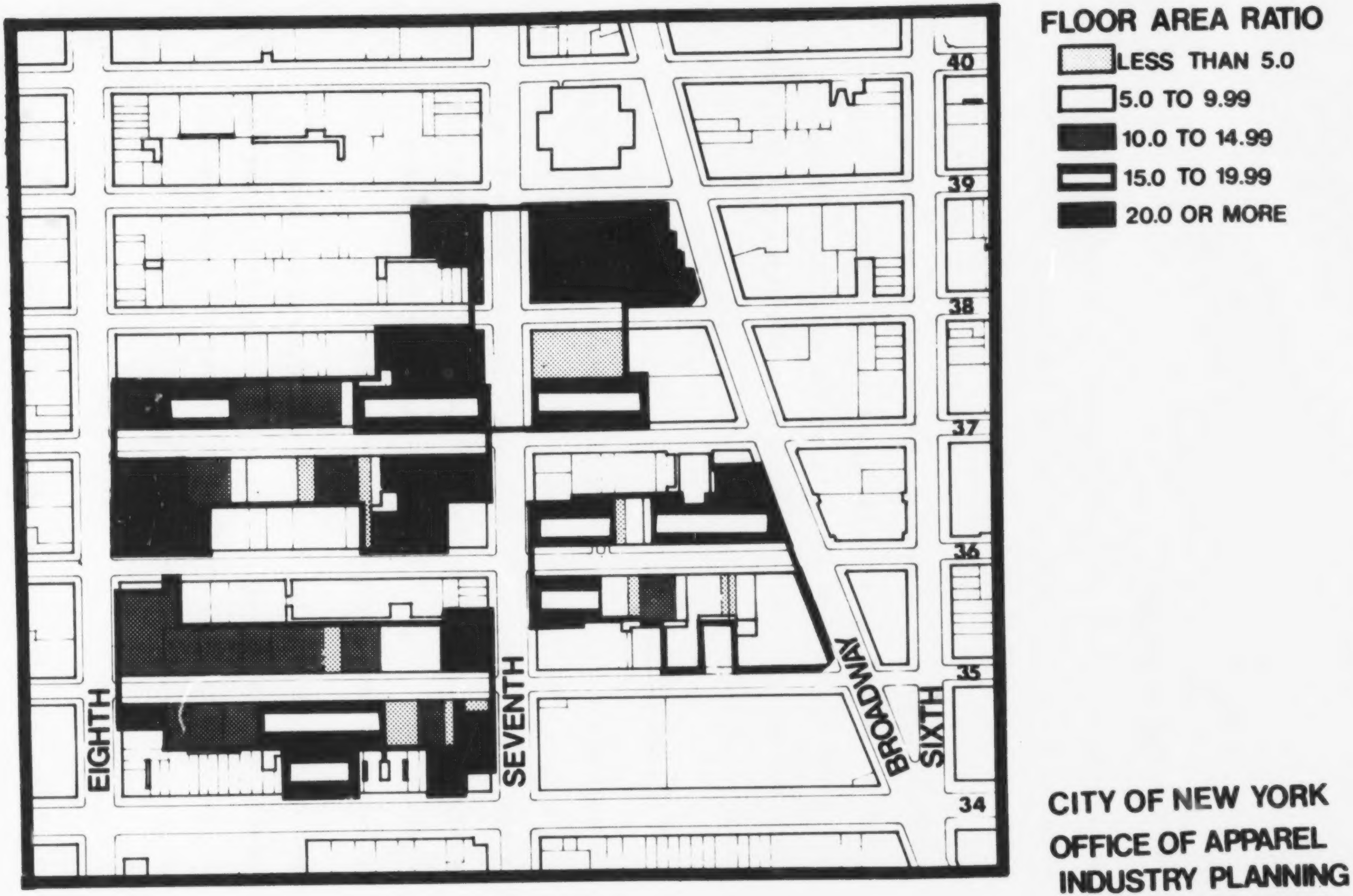
The sample segments occupy half of the Core, or 16.5 acres, as seen in Table III-14. The area is zoned M1-6 (FAR 10) except for the northeastern block in the Seventh Avenue segment, which is C5-3 (FAR 15). Almost all the buildings in the West 35th, West 37th, and Seventh Avenue segments have greater bulk than if built under present zoning. Half the buildings in the West 36th Street segment exceed the permitted FAR of 10, as seen in Figure III-12.

Typical of Citywide development patterns, buildings with frontages on the avenues have the highest FAR. All Core buildings were constructed prior to enactment of the Zoning Resolution in 1961. It superseded the 1916 resolution, which allowed larger structures to be built on the wider streets and avenues.

The sidestreet segments are close to current permitted densities ranging from 12.4 to 16.5. The Seventh Avenue segment has the highest FAR: 23, (Table III-14), well above the currently permitted density.

Table III-14 : SITE ANALYSIS, SAMPLE BLOCK SEGMENTS

	WEST 35th STREET	WEST 36th STREET	WEST 37th STREET	SEVENTH AVE.	TOTAL
Total Lot Area:					
Square Feet	185,888	138,397	210,834	183,099	718,218
Acres	4.3	3.2	4.8	4.2	16.5
Gross Floor Area Ratio	15.7	12.4	16.5	23.0	17.3
Total Assessed Value	$31,737,000	$20,456,000	$32,770,000	$56,035,000	$140,998,000
Assessed Value Per Square Foot of Lot Area	$170.73	$147.80	$155.43	$306.03	$193.32


FLOOR AREA RATIO
LESS THAN 5.0
5.0 TO 9.99
10.0 TO 14.99
15.0 TO 19.99
20.0 OR MORE
40
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37
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EIGHTH
SEVENTH
BROADWAY
SIXTH

GARMENT CENTER STUDY

Figure III-12

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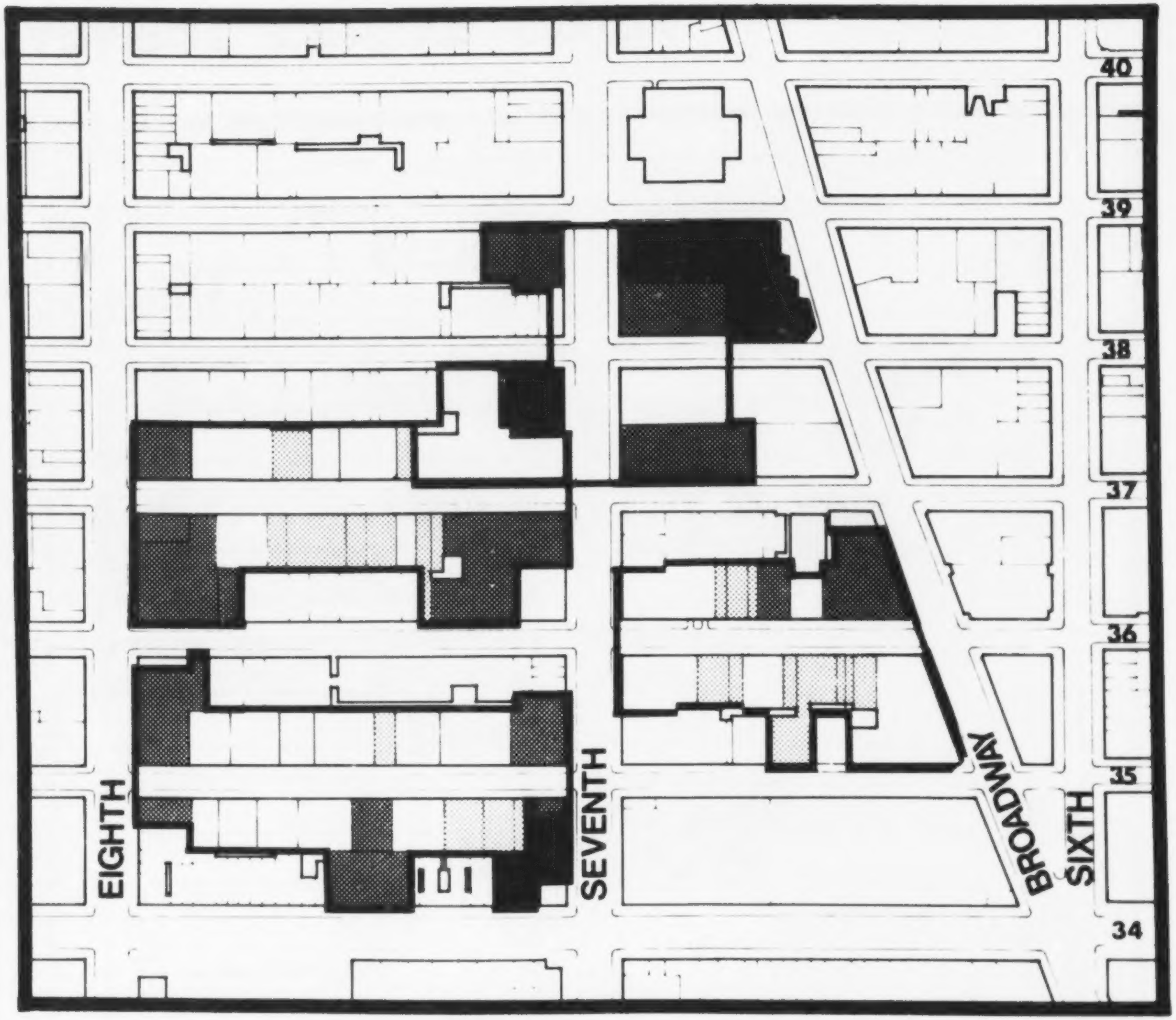
III.9.3 Assessed Value

As explained earlier, property values are closely related to building bulk. The avenue buildings are valued at more than $200 per square foot of lot area. Sidestreet buildings are valued at less than $200 per square foot, with some smaller buildings dropping below $100. (Table III-14 and Figure III-13). For this reason, rentals are higher in the avenue buildings. But, vacancy rates are lower in avenue structures because their addresses are more attractive to the firms and especially to the out-of-town buyers.

III.9.4 Employment

The sample block segments have the highest job concentration in the Core. The average density in the Core is 1,676.5 employees per acre. The sample block segments range from 3165.2 employees per acre on Seventh Avenue to 1532.8 on West 35th Street (Table III-15). There are more jobs in the avenue buildings because they are bigger (Figure III-14).

Most of the jobs in the segments are apparel and apparel-related. On the average, three out of four jobs in the Core are apparel or apparel-related. Three of the four segments exceed this average as shown in Table III-15.


40
39
38
37
36
35
34
EIGHTH
SEVENTH
BROADWAY
SIXTH

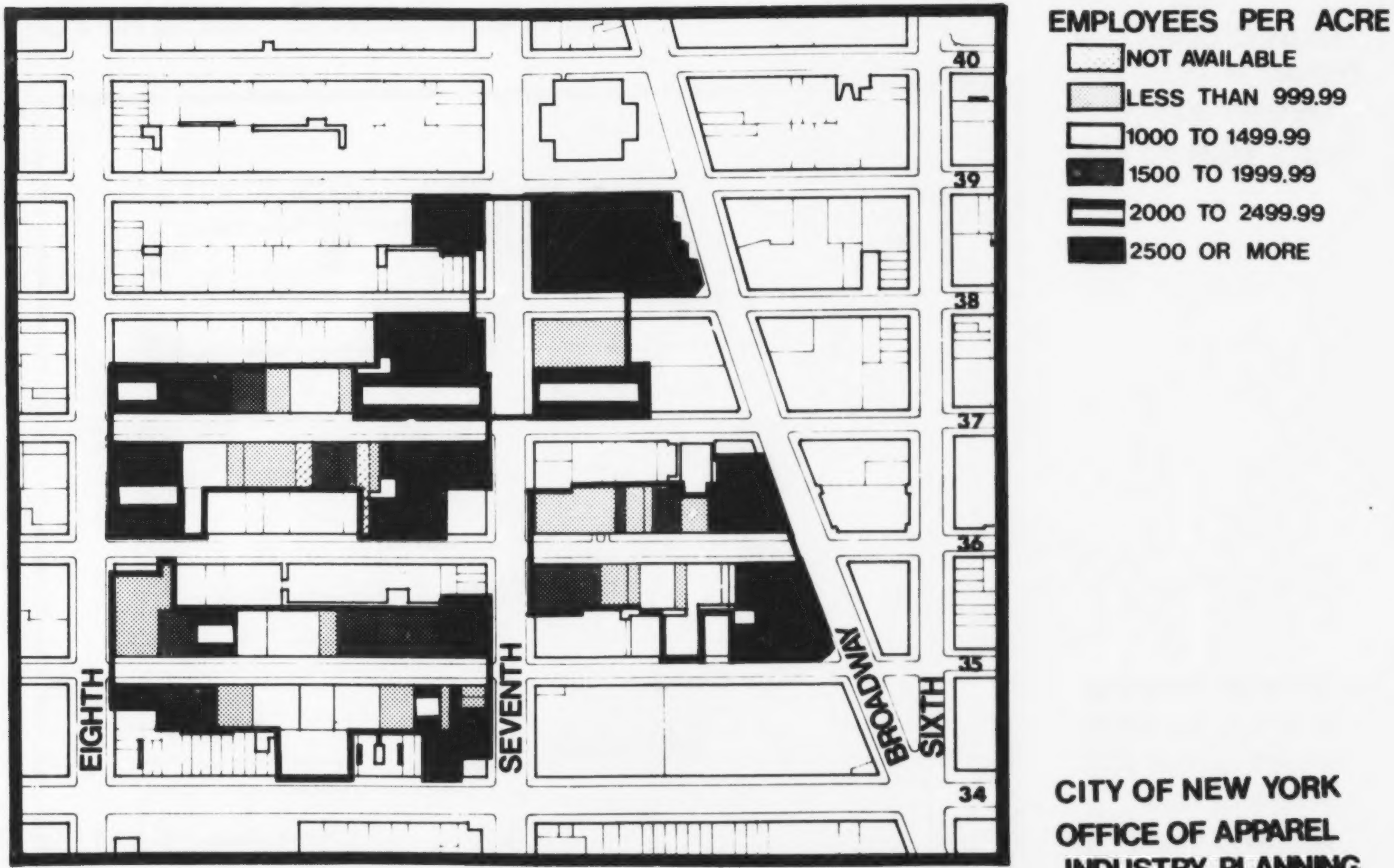
ASSESSED VALUE
PER SQUARE FOOT

- ▨ LESS THAN $100
- ☐ $100 TO $199.99
- ▩ $200 TO $299.99
- ▭ $300 TO $399.99
- ■ $400 OR MORE

GARMENT CENTER STUDY

Figure III-13

CITY OF NEW YORK
OFFICE OF APPAREL
INDUSTRY PLANNING
AND DEVELOPMENT
MARCH 1974


EMPLOYEES PER ACRE
NOT AVAILABLE
LESS THAN 999.99
1000 TO 1499.99
1500 TO 1999.99
2000 TO 2499.99
2500 OR MORE
40
39
38
37
36
35
34
EIGHTH
SEVENTH
BROADWAY
SIXTH

GARMENT CENTER STUDY Figure III-14

CITY OF NEW YORK
OFFICE OF APPAREL
INDUSTRY PLANNING
AND DEVELOPMENT
MARCH 1974

Table III-15: EMPLOYMENT ANALYSIS, SAMPLE BLOCK SEGMENTS

	WEST 35th STREET	WEST 36th STREET	WEST 37th STREET	SEVENTH AVE.
Total Firms:	527	383	583	677
Apparel	180	199	399	393
Apparel - Related	164	131	111	154
Other	183	53	73	130
Apparel and Apparel - Related Firms	65.2 %	86.1 %	87.4 %	80.7 %
Total Employees:	6,591	6,102	11,372	13,294
Apparel	3,797	3,751	9,128	8,347
Apparel - Related	901	1,411	790	2,552
Other	1,893	940	1,454	2,335
Apparel and Apparel - Related Employees	71.2 %	84.5 %	87.2 %	81.9 %
Employees Per Acre	1532.8	1906.9	2369.2	3165.2
Square Feet of Floor Space per Manufacturing Employee	384	246	304	290

The segments are also the most efficient users of manufacturing space. The average square feet of space per employee in the Study Area is 386; in the Core, it is 318. The average for each sample block segment, except for West 35th Street, is lower as shown in Table III-15. As stated earlier, the lower the amount of space per employee, the more efficient the use of space.

In conclusion, the area's physical characteristics and land use contribute to the goods movement difficulties in the Garment Center. The area's tall buildings, the majority of which were built prior to World War II, range in size from 12 to 20 stories and lack adequate elevators and off-street loading facilities. The area's land use, including zoning, building analysis, assessed value, employment, rents and vacancy rates, and sample block segments, was studied and discussed to gain a clearer understanding of land use and physical characteristics and their relationships and interrelationships with goods movement.

Table III-16

GARMENT CENTER STUDY AREA

FIFTH AVENUE TO TENTH AVENUE
W. 30th STREET TO WEST 42nd STREET

SUMMARY

BUILDING ANALYSIS:

	Number	Square Feet
Substantial Loft Building	226	32,276,206
Non-Substantial Loft Building	301	3,680,988
Substantial Office Building	70	21,832,360
Non-Substantial Office Building	38	1,927,280
Department Store	11	4,336,482
Commercial Taxpayers	72	509,297
Public and Private Institutions & Utilities	41	2,636,093
Government	2	901,432
Garage	39	1,111,938
Places of Public Assembly and Theatre	12	726,063
Walk-Up Residential Building	175	1,254,538
Elevator Residential Building	9	901,437
Walk-Up Hotel	9	133,639
Elevator Hotel	14	4,883,052
Vacant Building	1	7,801
Vacant Lot	65	959,424
	1085	78,078,030

TOTAL LOT AREA:

9,339,105 Square Feet

214.4 Acres

TOTAL ASSESSED VALUE:

$1,151,414,000*

ASSESSED VALUE PER SQUARE FOOT OF LOT AREA:

$147.64*

GROSS FLOOR AREA RATIO:

8.3

EMPLOYMENT ANALYSIS:

	FIRMS		EMPLOYEES	
	#	%	#	%
Apparel	3605	35.0	62,812	37.4
Apparel-Related	2587	25.1	24,422	14.5
Other	4096	39.9	80,899	48.1
	10,288		168,133	

*Does not include exempt or REVC properties

Table III-16

SUMMARY - 5th Ave. to 10th Ave. W. 30th St. to W. 42nd St. (con't)

EMPLOYEES PER ACRE:

784.2

SQUARE FEET OF MANUFACTURING SPACE PER MANUFACTURING EMPLOYEE:

386

LAND USE:

	Square Feet	Percent
Apparel Manufacture with Showrooms	15,475,085	19.8
Apparel Showrooms	2,419,022	3.2
Textile Showrooms	1,124,173	1.4
Misc. Showrooms	661,554	.8
Apparel Manufacture	8,138,900	10.4
Apparel Accessories Manufacture	228,199	.3
Misc. Manufacture	3,250,279	4.2
Office	23,401,555	29.9
Wholesale and Retail Trade & Services	7,066,137	9.0
Public & Private Institutions & Utilities	1,128,385	1.5
Government	1,980,791	2.5
Auto & Truck Storage & Service	1,395,186	1.8
Freight Handling Warehousing & Distribution	736,357	.9
Transportation	1,833,739	2.3
Parks and Recreation	578,322	.7
Walk-Up Residential	1,268,425	1.6
Elevator Residential	1,386,699	1.8
Walk-Up Hotel	200,226	.3
Elevator Hotel	4,421,660	5.7
Vacant Building	1,396,712	1.8
Vacant Land	101,335	.1
	78,192,741	

Table III-17

GARMENT CENTER CORE

BROADWAY TO EIGHTH AVENUE
W. 34th STREET TO W. 40th STREET

SUMMARY

BUILDING ANALYSIS:

	Number	Square Feet
Substantial Loft Building	84	14,238,193
Non-Substantial Loft Building	46	634,708
Substantial Office Building	5	2,451,909
Non-Substantial Office Building	7	148,721
Commercial Taxpayer	12	58,385
Private and Public Institutions and Utilities	6	347,097
Garage	2	104,668
Department Store	1	1,500,000
Walk-Up Residential	4	29,480
Walk-Up Hotel	2	18,270
Elevator Hotel	1	228,015
	170	19,759,446

TOTAL LOT AREA:

1,492,502 Square Feet

34.3 Acres

TOTAL ASSESSED VALUE:

$266,903,000

ASSESSED VALUE PER SQUARE FOOT OF LOT AREA:

$178.82

GROSS FLOOR AREA RATIO:

13.2

EMPLOYMENT ANALYSIS:

	FIRMS		EMPLOYEES	
	#	%	#	%
Apparel	1839	54.3	35,855	62.4
Apparel-Related	859	25.4	7,872	13.6
Other	687	20.3	13,776	24.0
	3385		57,503	

Table III-17

SUMMARY-BROADWAY TO EIGHTH AVE. W. 34th St. to W. 40th St. (con't)

EMPLOYEES PER ACRE:

1676.5

SQUARE FEET OF MANUFACTURING SPACE PER MANUFACTURING EMPLOYEE:

318

LAND USE:

	SQUARE FEET	PERCENT
Apparel Showrooms	803,398	4.1
Apparel Manufacture with Showrooms	11,982,078	60.6
Apparel Manufacture	2,687,649	13.6
Apparel Accessories Manufacture	68,639	.3
Textile Showrooms	25,319	.1
Misc. Manufacture	137,543	.7
Office	1,733,038	8.9
Wholesale and Retail Trade & Services	1,706,409	8.6
Public and Private Institutions and Utilities	19,865	.1
Auto and Truck Service and Storage	104,668	.5
Freight Handling, Warehousing and Distribution	4,133	--
Government	41,872	.2
Walk-Up Residential	21,212	.1
Walk-Up Hotel	18,270	.1
Elevator Hotel	288,635	1.5
Vacant Buildings	108,964	.6
Vacant Land	6,764	--
	19,758,448	